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JOURNAL

OF THE

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AMERICAN ORIENTAL SOCIETY.

EDITED BY

JAMES RICHARD JEWETT, AND HANNS OERTEL

Professor in the University of Chicago,
Chicago, Ill.

Professor in Yale University,
New Haven, Conn.

24543

THIRTIETH VOLUME

891.05

J. A. O. S.

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(76)

THE AMERICAN ORIENTAL SOCIETY,

NEW HAVEN, CONNECTICUT, U. S. A.

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TABLE OF CONTENTS.

	Page
ASAKAWA, K.: Notes on Village Government in Japan after 1600.	
Part I.	259
BARRET, L. C.: The Kashmirian Atharva Veda, Book II.	187
BLAKE, F. R.: Expression of the ideas "to be" and "to have" in the Philippine Languages	375
CASANOWICZ, J. M.: Note on Some Usages of לָקַח	343
GOTTHEIL, R. J. H.: A Door from the Madrasah of Barḳūk (with a Plate)	58
GOTTHEIL, R. J. H.: The Origin and History of the Minaret	132
GRAY, L. H.: The Parsi-Persian Burj-Nāmāh, or Book of Omens from the Moon	336
GRIEVE, L. C. G.: The Dasara Festival at Satara, India	72
HIRTH, F.: The Mystery of Fu-lin	1
HIRTH, F.: Mr. Kingsmill and the Hiung-nu	32
HIRTH, F.: Early Chinese notices of East African territories . . .	46
HOPKINS, E. W.: Mythological Aspects of Trees and Mountains in the Great Epic	347
JASTROW, M.: Another Fragment of the Etana Myth	101
MARGOLIS, M. L.: Complete Induction for the Identification of the Vocabulary in the Greek Versions of the Old Testament with its Semitic Equivalents; its Necessity. and the Means of obtaining it.	301
MICHELSON, T.: The Interrelation of the Dialects of the Fourteen- Edicts of Asoka. Part I. General Introduction and the dialect of the Shāhbāzgarhi and Mansehra redactions	77
✓ OLIPHANT, S. G.: The Vedic Dual. Part I. The Dual of bodily parts.	155
PRINCE, J. D.: A Hymn to Tammuz (Cuneiform Texts from the British Museum, Tablet 15821, Plate 18)	94

	Page
PRINCE, J. D.: A Hymn to the Goddess Kir-gi-lu (Cuneiform Texts from the British Museum, XV, Plate 23) with Translation and Commentary	325
VANDERBURGH, F. A.: A Hymn to Bel (Tablet 29623, CT. XV, Plates 12 and 13)	61
VANDERBURGH, F. A.: A Hymn to Mullil (Tablet 29615, CT XV, Plates 7, 8 and 9)	313
Proceedings of the Meeting in New York, April 1909 . . .	I
List of Members	XIII
Constitution and By-Laws	XXVIII
List of Publications	XXXI
Notices	XXXII

PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY,
AT ITS
MEETING IN NEW YORK, N. Y.

1909.

The annual meeting of the Society, being the one hundred and twenty-first occasion of its assembling, was held in New York City, at Columbia University, on Thursday, Friday, and Saturday of Easter Week, April 15th, 16th and 17th.

The following members were present at one or more of the sessions:

Adler,	Gilmore,	Joseph,	Olmstead,
Arnold, W. R.	Gottheil,	Kohn, Miss	Peters,
Asakawa,	Gray, L. H.	Kyle,	Quackenbos,
Barret,	Gray, Mrs. L. H.	Lanman,	Rosenau,
Barton,	Grieve, Miss	Levonian,	Rudolph, Miss
Black,	Haas,	Lyon,	Scott, C. P. G.
Brown,	Haessler, Miss	Madsen,	Scott, Mrs. S. B.
Carus,	Harper,	Margolis,	Shepard,
Campbell,	Haupt,	Meyer,	Sherman,
Colton, Miss	Haynes,	Michelson,	Steele,
Davidson,	Hirth,	Moore, J. H.	Thompson,
Demarest,	Hock,	Müller,	Todd,
Ember,	Hopkins,	Muss-Arnolt,	Torrey,
Frachtenberg,	Howland,	Nies, J. B.	Vanderburgh,
Frank,	Hussey, Miss	Nies, W. C.	Ward, W. H.
Friedenwald,	Jackson,	Oertel,	Ussher,
Friedlaender,	Jastrow,	Ogden, C. J.	Yohannan.
Gelbach,	Johnston,	Ogden, Miss E. S.	Total, 71.

The first session began on Thursday afternoon at three o'clock in the Trustees Room of the University, with the Presi-

dent of the Society, Professor E. Washburn Hopkins, in the chair.

The reading of the minutes of the meeting held in Cambridge, Mass., April 23d and 24th, 1908, was dispensed with, because they were presented in printed form as advance sheets ready to appear in the Journal (vol. xxix, 304—314).

The Committee of Arrangements presented its report, through Professor A. V. W. Jackson, in the form of a printed program, and made some special supplementary announcements.

The succeeding sessions of the Society were appointed for Friday morning at half-past nine, Friday afternoon at half-past two, and Saturday morning at half-past nine. It was announced that a luncheon would be given to the Society at Columbia University by the local members on Friday at one o'clock, and that arrangements had been made for a subscription dinner at the Park Avenue Hotel on Thursday evening at seven o'clock.

REPORT OF THE CORRESPONDING SECRETARY.

The annual report of the Corresponding Secretary, Professor A. V. Williams Jackson, was then presented as follows:

The Corresponding Secretary desires at the outset to express his thanks and appreciation to his predecessor in office, Professor Hopkins, now President of the Society, for the kindly help lent to him when assuming the new duties and for the aid so generously given to lighten the burden of work inevitable in a secretarial position.

The correspondence for the year has been somewhat extensive. There has been an ever-growing number of communications called forth by the inclusion of the American Oriental Society's name in the lists of organizations that are regularly published in various bulletins and records in different parts of the country. This is a good thing, as it draws wider attention to the scope and aims of the Society, and it might perhaps be well for us later to consider the question of enlarging somewhat the list of cities in which our meetings are held, since several Boards of Trade in other places have made tender of opportunities that might be offered if their particular city should be chosen for one of the annual meetings.

A pleasant part of the interchange of letters which has been carried on since the last meeting has been the correspondence with the newly elected members and with those who had been chosen as honorary members and who have expressed in complimentary terms their appreciation of the distinction conferred by the Society's electing them.

A sad but sympathetic part of the year's work has been writing expressions of thought and remembrance for those who have been bereaved

by the death of some member of the family who was thus lost as a member from our own midst. The list is not small considering our limited membership.

DEATHS.

HONORARY MEMBERS.

Professor Richard Pischel.
Professor Eberhard Schrader.

CORPORATE MEMBERS.

Mrs. Emma J. Arnold.
Mr. Ernest B. Fenollosa.
Mr. Francis Blackman Forbes.
President Daniel Coit Gilman.
Professor Charles Eliot Norton.
Professor John Henry Wright.

Professor Pischel, one of our more recent honorary members, was a German Sanskrit scholar of wide learning and whose name was recognized with honor throughout the learned world. He died at the age of fifty-nine, in December, 1908, at Madras, India, shortly after reaching the land to which he had devoted his life's studies and which it had ever been his heart's desire to visit.

Professor Schrader, of the University of Berlin, was made an honorary member of the Society in 1890, in recognition of his distinguished services to Oriental science especially in the line of Assyriological research. His long and eminent career, which led him to the position of a Privy Councillor at the Royal Court of Germany, lent a special dignity to the list of the Society's membership.

Mrs. Emma J. Arnold, of Providence, R. I., a corporate member of the Society since 1894, died at the home of her husband, Dr. Oliver H. Arnold, of Providence, on June 7, 1908.

Ernest F. Fenollosa, of Mobile, Alabama, since 1894 a member of the Society, died in England in October, 1908, just as he was about to return to America. His special interest lay in the field of Japan, where he had lived for some time, and he was a very agreeable lecturer and writer on the subject of its art, its history and its civilization.

Francis Blackman Forbes, of Boston, a member since 1864, died at his home in Boston, May 21, 1908, at the age of sixty-eight. Mr. Forbes had been a merchant in China for twenty-five years, until 1882, when he removed to Paris for four years and afterwards returned to his home in Massachusetts. His interest in Chinese flora and the fine collection of specimens which he made in that field won him a fellowship in the Linnean Society of London.

Daniel Coit Gilman, who was an active member of the Society for over half a century, having joined in 1857, and who was our president for thirteen years, from 1893 to 1906, died at his birthplace in Norwich,

on October 13, 1908, in the seventy-eighth year of his age. After his graduation from Yale College in 1852, he continued his studies at Cambridge and at Berlin, and then entered upon a distinguished career as an educator, as is well known to those who are acquainted with the educational development of this country whose interests he served so faithfully. He was President of the Johns Hopkins University from 1875 to 1901, when he retired as emeritus to take the presidency of the newly founded Carnegie Institution. He had previously enjoyed the honor of being appointed by the President of the United States to act as one of the five members of the United States Commission on the subject of the boundary line between Venezuela and Colombia. The valuable services which he rendered to the American Oriental Society during the thirteen years in which he was our presiding officer, and the distinction which he lent by his association with the Society, will always remain a bright memory.

Professor Charles Eliot Norton, of Harvard University, art critic and man of letters, who joined the Society in 1857, the same year as Mr. Gilman, passed away in the week after his contemporary's death. He died at Cambridge, Mass. on October 21, 1908. The public press throughout the land paid tribute to his memory. Although not an active attendant at the Oriental meetings, he never lost his interest during the fifty-one years of his membership. The part which Mr. Norton took as one of the first scholars to draw attention to Fitzgerald's version of Omar Khayyam will always associate his name with the interest taken in the Persian poet.

Professor John Henry Wright, of Harvard University, a member of the Oriental Society since 1898, died at Cambridge, Mass. on November 25, 1908. Professor Wright was born in Urumiah, Persia, the city which is believed by some to have been the birthplace of Zoroaster. Although Dr. Wright's specialty was in Greek, he had early taken an interest in Sanskrit in his student days, and showed his interest in the Oriental Society by joining it ten years ago.

In conclusion the Secretary is pleased to add that the major part of his correspondence has been of a special or technical character as associated with work now incorporated in the Journal or as carried on with fellow-searchers for light in the realm of the Land of the Dawn.

The details of the Secretary's report were accepted as presented and it was directed to place the report on record.

REPORT OF THE TREASURER.

The report of the Treasurer, Professor Frederick Wells Williams, was presented by the Corresponding Secretary and read as follows:

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL
SOCIETY FOR THE YEAR ENDING DECEMBER 31, 1908.

Receipts.

Balance from old account, Dec. 31, 1907		\$ 59.12
Dues (190) for 1908	\$ 950.00	
.. (64) for other years	320.00	
.. (14) for Hist. S. R. Sect.	28.00	
	\$ 1,298.00	
Sales of Journal	193.79	
Life Memberships (2)	150.00	
Subscriptions collected for Or. Bibl. Subvention . .	96.00	
State National Bank Dividends	122.21	
Annual Interest from Savings Banks	47.22	
		1,907.22
		\$ 1,966.34

Expenditures.

T. M. and T. Co., printing vol. xxviii (remainder) .	\$ 1,364.48
Librarian, postage, etc.	7.09
Other postage and express	6.77
Subvention to Orientalische Bibliographie	100.00
Balance to general account	\$ 488.00
	\$ 1,966.34

STATEMENT.

	1907	1908
Bradley Type Fund	\$ 2,481.93	\$ 2,653.41
Cotheal Fund	1,000.00	1,000.00
State National Bank Shares	1,950.00	1,950.00
Connecticut Savings Bank	6.03	6.39
National Savings Bank	11.67	12.11
Interest Cotheal Fund	149.27	195.69
Cash on hand	102.93	12.54
Interest	55	
	\$ 5,702.38	\$ 5,830.14

The report of the Treasurer was supplemented verbally by Professor Jackson with a statement, merely for record, that the Directors had voted that the Society should continue next year to contribute as before to the Orientalische Bibliographie, and that the Treasurer was authorized to pay said contribution directly out of the funds in the treasury.

REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by Professor C. C. Torrey, as follows:

We hereby certify that we have examined the account book of the Acting Treasurer of this Society, and have found the same correct. and

that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass-books and have found all correct.

CHARLES C. TORREY, } *Auditors.*
HANNS OERTEL, }

NEW HAVEN, April 17, 1909.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

Miss Margaret D. Whitney has continued her work of cataloguing the Society's Library. The response to a circular letter to our exchanges asking that incomplete sets be, as far as possible, completed, has been very cordial and generous. The next report of the Librarian will contain a bibliographical list of all periodical literature deposited in our Library. As in previous reports, the Librarian again calls attention to the absolute necessity of a small sum of money for the binding of our accessions. It is impossible to allow unbound volumes to go out of the library, and as almost all of our members live at a distance, unbound books cannot be used by them.

The thanks of the Society are again due to Miss Margaret D. Whitney for her continued interest in the Library, to Mr. Schwab, Librarian of Yale University, for many favours, and to Mr. Gruener of the Yale Library for valued assistance in mailing.

REPORT OF THE EDITORS.

The report of the Editors of the Journal of the Society, Professors Oertel and Jewett, was made by Professor Oertel as follows:

The editors regret that owing to the delay in setting up and correcting one of the articles, it has not been possible to complete the current number of the Journal in time to have it in the hands of the members before this meeting. It will be sent out early in May. As is well known to the members, the cost of printing of the Society's Journal has for some years past exceeded the Society's income and made it necessary to draw on our invested funds. It did not seem wise to the editors to continue indefinitely such a policy of living beyond our means. They, therefore, reluctantly decided to publish the Society's Journal for the current year in *one* volume of about 100 pages less than has been customary.

By direction of the Board of Directors, the Editors will make arrangements for printing the next volume of the Journal abroad, and they expect that the saving thus effected will make it possible to print the Journal as before without exceeding the income of the Society.

The Editors, finally, desire to call the attention of members to the rule that all papers read at the Society's meeting are presumed to be available for printing in the Society's Journal and subject to the call of the Editors for that purpose.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBERS.

Rev. Canon Samuel R. Driver, M. Charles Clermont-Ganneau,
Professor Hermann Jacobi.

CORPORATE MEMBERS.

Mr. George William Brown,	Mr. James H. Hyde,
Mr. Charles Dana Burrage,	Mr. Thomas W. Kingsmill,
Señor Felipe G. Caldéron,	Rev. M. G. Kyle,
Mr. Irving Comes Demarest,	Mr. Levon J. K. Levonian.
Dr. Carl Frank,	Mr. Albert Howe Lybber,
Dr. Herbert Friedenwald,	Mr. Charles J. Morse,
Miss Marie Gelbach,	Mr. Albert Ten Eyck Olmstead,
Dr. George W. Gilmore,	Mr. Walter Peterson,
Miss Luise Haessler,	Mr. George V. Schick,
Edward H. Hume, M. D.,	Dr. T. H. Pardo de Tavera,
Rev. Sydney N. Ussher.	

OFFICERS FOR 1909—1910.

The committee appointed at Cambridge to nominate officers for the ensuing year consisted of Professors Francis Brown, Torrey, and Oertel, (see Journal, vol. xxix, 311) and their report recommended the following names, which were duly elected:

President—Dr. William Hayes Ward, of New York.

Vice-Presidents—Professor Maurice Bloomfield, of Baltimore; Professor Paul Haupt, of Baltimore; Professor Henry Hyvernatt, of Washington.

Corresponding Secretary—Professor A. V. Williams Jackson, of New York.

Recording Secretary—Professor George F. Moore, of Cambridge, Mass.

Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.

Treasurer—Professor Frederick Wells Williams, of New Haven.

Librarian—Professor Hanns Oertel, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lanman, of Cambridge; E. Washburn Hopkins, of New Haven; Richard Gottheil, of New York; Charles C. Torrey, of New Haven; Robert F. Harper and James R. Jewett, of Chicago.

ADDRESS BY THE PRESIDENT.

At four o'clock, at the conclusion of the business session, the President of the Society, Professor E. Washburn Hopkins,

of Yale University, delivered his annual address on "Exaggerations of Tabu as a Religious Motive."

The Society adjourned at the close of the address to meet at half past seven o'clock for dinner at the Park Avenue Hotel.

FRIDAY SESSION.

The members re-assembled on Friday morning at half past nine o'clock for the second session. The following communications were presented:

Doctor K. Asakawa, of Yale University, Notes on village administration in Japan under the Tokugawa.—Remarks by Professor Hopkins.

Professor L. C. Barret, of Princeton University, Concerning Kashmir Atharva-Veda, Book 2.—Remarks by Professor Lanman.

Professor G. A. Barton, of Bryn Mawr College. The notation for 216,000 in the Tablets of Telloh.—Remarks by Professors Jastrow and Haupt.

Doctor George F. Black, of Lenox Library, N. Y., Concerning the Gypsy Lore Society, presented by Dr. C. P. G. Scott.

Doctor A. Ember, of Johns Hopkins University, Hebrew stems with prefixed *ʔ*.—Remarks by Professors Haupt and W. Max Müller.

Dr. M. Margolis, of the Jewish Publication Society, Phila.. The necessity of complete induction for finding the Semitic equivalents of Septuagint words.—Remarks by Professor Haupt.

Mr. L. J. Frachtenberg, of New York, The superstition of the evil eye in Zoroastrian literature.—Remarks by Professors Hopkins, Müller, Jastrow. Peters.

Professor L. Friedlaender, of the Jewish Theological Seminary of America, The Fountain of Life and the Islands of the Blessed in the Alexander legends.—Remarks by Professors Haupt and Jastrow, and Doctor Yohannan.

Professor R. Gottheil, of Columbia University, The *Kitāb Dīwān Miṣr*.

Professor A. V. W. Jackson, of Columbia University, A legend of aerial navigation in Ancient Persia.—Remarks by Professors Friedlaender and Jastrow.

Professor M. Jastrow, of the University of Pennsylvania, Another fragment of the Etana myth.

At twelve thirty the Society took a recess till half past two o'clock, and were invited to luncheon as guests of the local members.

On convening again after luncheon the session was held in the auditorium of Schermerhorn Hall, Columbia, President Hopkins presiding, and the following papers were presented:

Professor R. Gottheil, of Columbia University, The origin and history of the minaret.—Remarks by Professor Jastrow.

Miss L. C. G. Grieve, Ph. D., of New York, The Dasara Festival at Satara, India.—Remarks by Professor Hopkins.

Professor Paul Haupt, of Johns Hopkins University, The Location of Mount Sinai.

Professor C. R. Lanman, of Harvard University, Pāli book titles and how to cite them.—Remarks by Professors Hopkins and Haupt.

Professor W. Max Müller, of Philadelphia, Scenes of the religious worship of the Canaanites on Egyptian monuments. Illustrated by stereopticon photographs.—Remarks by Professor Haupt.

Professor D. G. Lyon, of Harvard University, The Harvard excavations at Samaria. Illustrated by stereopticon photographs.—Remarks by Professor Lanman.

Dr. T. A. Olmstead, Preparatory School, Princeton, N. J., Some results of the Cornell Expedition to Asia Minor and the Assyro-Babylonian Orient.

Dr. Truman Michelson, of Ridgefield, Conn., The general interrelation of the dialects of Asoka's Fourteen Edicts, with some remarks on the home of Pāli.

Professor F. Hirth, of Columbia University, On Chinese Hieroglyphics.

At five thirty the Society adjourned for the day; and the evening was reserved for an informal gathering of the members for supper and general conversation.

SATURDAY SESSION.

On Saturday morning at half-past nine, the fourth and concluding session was held in Room 407 of Schermerhorn Hall, and was devoted to the reading of papers and the transaction of important business.

In the business portion of the session, which formed the first matter of consideration, the Committee on the Nomination of Officers reported the names as already given above.

The Chair then appointed as committee to nominate officers at the first session of the next annual meeting, the following members:

Professor Robert F. Harper, of Chicago;

Dr. George C. O. Haas, of Columbia;

Dr. Albert A. Madsen, of Cleveland, Ohio.

The Directors reported that they had appointed Professor Hanns Oertel and Professor James R. Jewett as Editors of the Journal for the ensuing year.

The place and date of the next meeting as appointed by the Directors was further announced to be Baltimore, during Thursday, Friday, and Saturday of Easter week, March 31st, April 1st and 2d, 1910.

The Committee to audit the Treasurer's accounts consists of Professors Torrey and Oertel.

Professor Hirth brought before the Society for consideration the question of the tariff imposed upon books in foreign languages imported into the United States. Upon motion of Professor Haupt, the following petition was unanimously adopted and the Corresponding Secretary was instructed to forward it in an appropriate manner to the authorities at Washington:

The American Oriental Society, assembled at its annual meeting held in New York, April 17, 1909, respectfully petition the Senate and House of Representatives of the United States of America that all scientific books dealing with foreign languages imported from abroad be admitted free of duty.

The presentation of papers was resumed in the following order:

Professor Christopher Johnston, of Johns Hopkins University:—

(a) The fable of the horse and the ox in cuneiform literature.

(b) Assyrian lexicographical notes.

(c) The Sumerian verb.

Remarks by Professor Haupt.

Dr. Ishya Joseph, of New York, Notes on some matters relating to Arabic philology.—Remarks by Professor Haupt.

Professor Hanns Oertel, of Yale University:

(a) Some cases of analogy formation.

(b) The Sanskrit root *ḍṛp*, 'stumble'.

Remarks by Professor Hopkins.

Dr. F. A. Vanderburgh, of New York, A hymn to Bel, Tablet 29623, British Museum, as published in CT. xv, plates 12 and 13.

Dr. A. Yohannan, of Columbia University, A Turkish manuscript treatise on physiognomy.

Professor Paul Haupt, of Johns Hopkins University:

- (a) Pi-hahiroth and the route of the Exodus.
- (b) The disgrace and rehabilitation of Galilee.—(Isaiah ix.1.)

At eleven thirty Vice-President Haupt was invited to the Chair by Professor Hopkins on his withdrawal. The session continued as follows:

Professor F. Hirth, of Columbia University, On early Chinese notices of African territories.—Remarks by Professors Haupt and W. Max Müller.

Professor A. V. W. Jackson, of Columbia University, Notes on Zoroastrian chronology.

Professor I. Friedlaender, of the Jewish Theological Seminary of America, N. Y., 'Abdallah b. Saba, the Jewish founder of Shiism.

Before the session closed, the following resolution was unanimously adopted:

The American Oriental Society desires to express its thanks to the President and Trustees of Columbia University and to the local members for the courtesies which they have extended to the Society during this meeting; and to the Committee of Arrangements for the provisions they have made for its entertainment.

The Society adjourned at half past twelve on Saturday to meet in Baltimore, Md., March 31st, April 1st, and 2d 1910.

The following communications were read by title:

Dr. Bigelow, of Boston, Nirvana and the Buddhist moral code.

Dr. Blake, of Johns Hopkins University:

- (a) The Tagalog verb.
- (b) Brockelmann's Comparative Semitic Grammar.

Professor Bloomfield, of Johns Hopkins University, Studies on the text and language of the Rig-Veda.

Professor Gottheil, of Columbia University, A door from the Madrassah of Barkūk.

Reverend A. Kohut, of New York:

- (a) Royal Hebraists.
- (b) A tradition concerning Haman in Albiruni. and the story of Rikayon in the Sefer Ha-Yashar.

Professor Prince, A Hymn to Tammuz.

Dr. W. Rosenau, of Johns Hopkins University:

- (a) The uses of נב in Post-Biblical Hebrew.
- (b) Abstract formations in the philosophical Hebrew.

Professor Torrey, of Yale University:

- (a) The question of the date of the Samaritan schism.
- (b) The lacuna in Neh. ix. 5 f.

LIST OF MEMBERS

The number placed after the address indicates the year of election.

I. HONORARY MEMBERS.

- M. AUGUSTE BARTH. Membre de l'Institut, Paris, France. (Rue Garancière, 10.) 1898
- Dr. RAMKRISHNA GOPAL BHANDARKAR, C. I. E., Dekkan Coll., Poona, India. 1887.
- JAMES BURGESS, LL.D., 22 Seton Place, Edinburgh, Scotland. 1899.
- Prof. CHARLES CLERMONT-GANNEAU, 1 Avenue de l'Alma, Paris.
- Prof. T. W. RHYS DAVIDS, Harboro' Grange, Ashton-on-Mersey, England. 1907.
- Prof. BERTHOLD DELBRUECK, University of Jena, Germany. 1878.
- Prof. FRIEDRICH DELITZSCH, University of Berlin, Germany. 1893.
- Canon SAMUEL R. DRIVER, Oxford, England 1909.
- Prof. ADOLPH ERMAN, Steglitz, Friedrich Str. 10/11, Berlin, Germany. 1903.
- Prof. RICHARD GARBE, University of Tübingen, Germany. (Biesinger Str. 14.) 1902.
- Prof. KARL F. GELDNER, University of Marburg, Germany. 1905.
- Prof. IGNAZ GOLDZIEHER, vii Holló-Utca 4, Budapest, Hungary. 1906.
- GEORGE A. GRIERSON, C.I.E., D.Litt., I.C.S. (retired), Rathfarnham, Camberley, Surrey, England. Corporate Member, 1899; Hon., 1905.
- Prof. IGNAZIO GUIDI, University of Rome, Italy. (Via Botteghe Oscure 24.) 1893.
- Prof. HERMANN JACOBI, University of Bonn. 59 Niebuhrstrasse, Bonn, Germany. 1909.
- Prof. HENDRIK KERN, 45 Willem Barentz-Straat, Utrecht, Netherlands. 1893.
- Prof. ALFRED LUDWIG, University of Prague. Bohemia. (Königliche Weinberge, Krameriusgasse 40.) 1898.
- Prof. GASTON MASPERO, Collège de France, Paris, France. (Avenue de l'Observatoire, 24.) 1898.
- Prof. EDUARD MEYER, University of Berlin, Germany. Gross-Lichterfelde-West, Mommsen Str. 7) 1908.
- Prof. THEODOR NOELDEKE, University of Strassburg, Germany. (Kalbsgasse 16.) 1878.
- Prof. HERMANN OLDENBERG, University of Göttingen, Germany. 1910. (27/29 Nikolausberger Weg.)
- Prof. EDUARD SACHAU, University of Berlin, Germany. (Wormser Str. 12, W.) 1887.

- EMILE SENART, Membre de l'Institut de France, 18 Rue François I^{er}, Paris, France. 1908.
 Prof. ARCHIBALD H. SAYCE, University of Oxford, England. 1893.
 Prof. JULIUS WELLHAUSEN, University of Göttingen, Germany. (Weber Str. 18a.) 1902.
 Prof. ERNST WINDISCH, University of Leipzig, Germany. (Universitäts Str. 15.) 1890. [Total 26]

II. CORPORATE MEMBERS.

Names marked with * are those of life members.

- Rev. Dr. JUSTIN EDWARDS ABBOTT, Tardeo, Bombay, India. 1900.
 Dr. CYRUS ADLER, 2041 North Broad St., Philadelphia, Pa. 1884.
 WILLIAM E. M. AITKEN, 7 Howland St. Cambridge, Mass. 1910.
 F. STURGES ALLEN, 246 Central St., Springfield, Mass. 1904.
 Miss MAY ALICE ALLEN, Williamstown, Mass. 1906.
 Prof. WILLIAM R. ARNOLD, Theological Seminary, Cambridge, Mass. 1893.
 Prof. KANICHI ASAKAWA (Yale Univ.), 870 Elm St., New Haven, Conn. 1904.
 Rev. EDWARD E. ATKINSON, 94 Brattle St., Cambridge, Mass. 1894.
 Prof. J. CULLEN AYER (P. E. Divinity School), 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
 Miss ALICE M. BACON, Smith College, Northampton, Mass. 1907.
 Hon. SIMEON E. BALDWIN, LL D., 44 Wall St., New Haven, Conn. 1898.
 Prof. LEROY CARR BARRET, Dartmouth College, Hanover, N. H. 1903.
 Prof. GEORGE A. BARTON, Bryn Mawr College, Bryn Mawr, Pa. 1888.
 Prof. L. W. BATTEN, 232 East 11th St., New York. 1894.
 Prof. HARLAN P. BEACH (Yale Univ.), 346 Willow St., New Haven, Conn. 1898.
 Prof. WILLIS J. BEECHER, D.D., Theological Seminary, Auburn, N. Y. 1900.
 HAROLD H. BENDER, Johns Hopkins University, Baltimore, Md. 1906.
 Rev. JOSEPH F. BERG, Port Richmond, S. I., N. Y. 1893.
 Prof. GEORGE R. BERRY, Colgate University, Hamilton, N. Y. 1907.
 Prof. JULIUS A. BEWER (Union Theological Seminary), 700 Park Ave. New York, N. Y. 1907.
 Dr. WILLIAM STURGIS BIGELOW, 60 Beacon St., Boston, Mass. 1894.
 Prof. JOHN BINNEY, Berkeley Divinity School, Middletown, Conn. 1887.
 GEORGE F. BLACK, Ph.D., Lenox Library, Fifth Ave. and 70th St., New York, N. Y. 1907.
 Dr. FRANK RINGGOLD BLAKE (Johns Hopkins Univ.), Dixon Park, Mt. Washington, Md. 1900.
 Rev. PHILIP BLANC, Johns Hopkins University, Baltimore, Md. 1907.
 Rev. DAVID BLAUSTEIN, Chicago Hebrew Institute, 485 West Taylor St. Chicago, Ill. 1891.
 Dr. FREDERICK J. BLISS, Protest. Syrian College, Beirut, Syria. 1898.
 FRANCIS B. BLODGETT, General Theological Seminary, Chelsea Square, New York, N. Y. 1906.
 Prof. CARL AUGUST BLOMGREN, Augustana College and Theol. Seminary, Rock Island, Ill. 1900.

- Prof. MAURICE BLOOMFIELD, Johns Hopkins University, Baltimore, Md. 1881.
- Dr. ALFRED BOISSIER, Le Rivage près Chambésy, Switzerland. 1897.
- Dr. GEORGE M. BOLLING (Catholic Univ. of America), 1784 Corcoran St., Washington, D. C. 1896.
- Prof. C. B. BRADLEY, 2639 Durant Ave., Berkeley, Cal. 1910.
- Prof. RENWARD BRANDSTETTER, Reckenbühl 18, Villa Johannes, Lucerne, Switzerland. 1908.
- Prof. JAMES HENRY BREASTED, University of Chicago, Chicago, Ill. 1891.
- Prof. CHAS. A. BRIGGS (Union Theological Sem.), 700 Park Ave., New York, N. Y. 1879.
- Prof. C. A. BRODIE BROCKWELL, McGill University, Montreal, Canada. 1906.
- Pres. FRANCIS BROWN (Union Theological Sem.), 700 Park Ave., New York. N. Y. 1881.
- Rev. GEORGE WILLIAM BROWN, Jubbulpore, C. P., India. 1909.
- Prof. CARL DARLING BUCK, University of Chicago, Chicago, Ill. 1892.
- HAMMOND H. BUCK, Division Sup't. of Schools, Alfonso, Cavite Provinces, Philippine Islands. 1908.
- ALEXANDER H. BULLOCK, State Mutual Building, Worcester, Mass. 1910.
- EUGEN WASTON BURLINGAME, 118 McKean House, West Philadelphia, Pa. 1910.
- CHARLES DANA BURRAGE, 85 Ames Building, Boston, Mass. 1909.
- Prof. HOWARD CROSBY BUTLER, Princeton University, Princeton, N. J. 1908.
- Rev. JOHN CAMPELL, Kingsbridge, New York, N. Y. 1896.
- Rev. SIMEON J. CARR, 1527 Church St., Frankford, Philadelphia, Pa. 1892.
- Pres. FRANKLIN CARTER, care Hon. F. J. Kingsbury, Waterbury, Conn. 1873.
- Dr. PAUL CARUS, La Salle, Illinois. 1897.
- Dr. I. M. CASANOWICZ, U. S. National Museum, Washington, D. C. 1893.
- Miss EVA CHANNING, Hemenway Chambers, Boston, Mass. 1883.
- Dr. F. D. CHESTER, The Bristol, Boston, Mass. 1891.
- WALTER E. CLARK, 37 Walker St., Cambridge, Mass. 1906.
- Prof. ALBERT T. CLAY (Yale Univ.) New Haven, Conn. 1907.
- *ALEXANDER SMITH COCHRAN, Yonkers, N. Y. 1908.
- *GEORGE WETMORE COLLES, 62 Fort Greene Place, Brooklyn, N. Y. 1882.
- Prof. HERMANN COLLITZ, Johns Hopkins University, Baltimore, Md. 1887.
- Miss ELIZABETH S. COLTON, 23 Park St., Easthampton, Mass. 1896.
- Prof. C. EVERETT CONANT, 515 Carlisle Place, Chattanooga, Tenn. 1905.
- WILLIAM MERRIAM CRANE, 16 East 37th St., New York, N. Y. 1902.
- Rev. CHARLES W. CURRIER, 913 Sixth St., Washington, D. C. 1904.
- Dr. WILLIAM R. P. DAVEY (Harvard Univ.), 21 Mellen St., Cambridge, Mass. 1908.
- Dr. HAROLD S. DAVIDSON, 1700 North Payson St., Baltimore, Md. 1908.
- Prof. JOHN D. DAVIS, Princeton Theological Seminary, Princeton, N. J. 1888.
- IRVING C. DEMAREST, 54 Essex st., Hackensack, N. J. 1909.
- Prof. ALFRED L. P. DENNIS, Madison, Wis. 1900.
- JAMES T. DENNIS, University Club, Baltimore, Md. 1900.
- Rev. D. STUART DODGE, 99 John St., New York, N. Y. 1867.
- Dr. HARRY WESTBROOK DUNNING, 5 Kilsyth Road, Brookline, Mass. 1894.

- Prof. M. W. EASTON, 224 South 43d St., Philadelphia. Pa. 1872.
- Dr. FRANKLIN EDGERTON, Johns Hopkins University, Baltimore, Md. 1910.
- Prof. FREDERICK G. C. EISELEN, Garrett Biblical Inst., Evanston, Ill. 1901.
- Mrs. WILLIAM M. ELLICOTT, 106 Ridgewood Road, Roland Park, Md. 1897.
- Prof. LEVI H. ELWELL, Amherst College, 5 Lincoln Ave., Amherst, Mass. 1883.
- Dr. AARON EMBER, Johns Hopkins University. 1902.
- Rev. ARTHUR H. EWING, The Jumna Mission House, Allahâbâd, N. W. P., India. 1900.
- Rev. Prof. C. P. FAGNANI, 772 Park Ave., New York, N. Y. 1901.
- Prof. EDWIN WHITFIELD FAY (Univ. of Texas), 200 West 24th St., Austin, Texas. 1888.
- Prof. HENRY FERGUSON, St. Paul's School, Concord, N. H. 1876.
- Dr. JOHN C. FERGUSON, 16 Love Land, Shanghai, China. 1900.
- Prof. RALPH HALL FERRIS (Theological Seminary), 45 Warren Ave., Chicago, Ill. 1905.
- CLARENCE STANLEY FISHER, 4152 Parkside Ave., Philadelphia, Pa. 1905.
- *LADY CAROLINE DE FILIPPI FITZGERALD, 167 Via Urbana, Rome, Italy. 1886.
- Rev. WALLACE B. FLEMING, Maplewood, N. J. 1906.
- Rev. THEODORE C. FOOTE, Johns Hopkins University, Baltimore, Md. 1900.
- Prof. HUGHELL E. W. FOSBROKE, 9 Acacia St., Cambridge, Mass. 1907.
- MARQUIS ANTOINE FRABASILIS, 1017 East 187th St., New York, N. Y., 1907.
- LEO J. FRACHTENBERG, Hartley Hall, Columbia University, New York, N. Y. 1907.
- Rev. Prof. JAS. EVERETT FRAME (Union Theological Sem.), 700 Park Ave. New York, N. Y. 1892.
- Dr. CARL FRANK, 23 Montague St., London, W. C., England. 1909.
- Dr. HERBERT FRIEDENWALD, 338 West 85th St., New York, N. Y. 1909.
- Prof. ISRAEL FRIEDLAENDER (Jewish Theological Sem.), 61 Hamilton Place, New York, N. Y. 1904.
- Dr. WILLIAM H. FURNESS, 3d, 1906 Sansom St., Philadelphia, Pa. 1897.
- Dr. FLETCHER GARDNER, 202 East Kirkwood Ave., Bloomington, Ind. 1905.
- ROBERT GARRETT, Continental Building, Baltimore, Md. 1903.
- Miss MARIE GELBACH, 534 West 143d St., New York, N. Y. 1909.
- Prof. BASIL LANNEAU GILDERSLEEVE, Johns Hopkins University, Baltimore, Md. 1858.
- Prof. WILLIAM WATSON GOODWIN (Harvard Univ.), 5 Follen St., Cambridge, Mass. 1857.
- Prof. RICHARD J. H. GOTTHEIL, Columbia University, New York, N. Y. 1886.
- Miss FLORENCE A. GRAGG, 26 Maple Ave., Cambridge, Mass. 1906.
- Prof. ELIHU GRANT (Smith College), Northampton, Mass. 1907.
- Mrs. ETHEL WATTS MUMFORD GRANT, 31 West 81st St., New York, N. Y. 1904.
- Dr. LOUIS H. GRAY, German Valley, N. J. 1897.

- Mrs. LOUIS H. GRAY, Geimun Valley N. J. 1907.
Miss LUCIA C. GRAEME GRIEVE, 462 West 151st St., New York, N. Y. 1894.
Prof. LOUIS GROSSMANN (Hebrew Union College), 2212 Park Ave., Cincinnati, O. 1890.
Rev. Dr. W. M. GROTON, Dean of the Protestant Episcopal Divinity School, 5000 Woodlawn Ave., Philadelphia, Pa. 1907.
*GEORGE C. O. HAAS, 254 West 136th St., New York, N. Y. 1903.
Miss LUISE HAESSLER, Whittier Hall, Columbia University, New York, N. Y. 1909.
Dr. CARL C. HANSEN, Si Phya Road, Bangkok, Siam. 1902.
PAUL V. HARPER, 59 th St. and Lexington Ave., Chicago, Ill. 1906.
Prof. ROBERT FRANCIS HARPER, University of Chicago, Chicago, Ill. 1886.
Prof. SAMUEL HART, D. D., Berkeley Divinity School, Middletown, Conn. 1879.
Prof. PAUL HAUPT (Johns Hopkins Univ.), 2511 Madison Ave., Baltimore, Md. 1883.
Dr. HENRY HARRISON HAYNES, 6 Ellery St., Cambridge, Mass. 1892.
Col. THOS. WENTWORTH HIGGINSON, 25 Buckingham St., Cambridge, Mass. 1869.
Prof. HERMANN V. HILPRECHT (Univ. of Pennsylvania), 807 Spruce St., Philadelphia, Pa. 1887.
Rev. Dr. WILLIAM J. HINKE, 28 Court St., Auburn, N. Y. 1907.
Prof. FRIEDRICH HIRTH (Columbia Univ.), 501 West 113th St., New York, N. Y. 1903.
Prof. CHARLES T. HOCK (Theological Sem.), 220 Liberty St., Bloomfield, N. J. 1903.
*Dr. A. F. RUDOLF HOERNLE, 8 Northmoor Road, Oxford, England. 1893.
Rev. HUGO W. HOFFMAN, 306 Rodney St., Brooklyn, N. Y. 1899.
Prof. FRANKLIN W. HOOPER, 502 Fulton St., Brooklyn, N. Y. 1906.
*Prof. E. WASHBURN HOPKINS (Yale Univ.), 299 Lawrence St., New Haven, Conn. 1881.
Miss SARAH FENTON HOYT, 17 East 95th St., New York, N. Y. 1910.
HENRY R. HOWLAND, Natural Science Building, Buffalo, N. Y. 1907.
Dr. EDWARD H. HUME, Changsha, Huan, China. 1909.
Miss ANNIE K. HUMPHREY, 1114 14th St., Washington, D. C. 1873.
Miss MARY INDA HUSSEY, 4 Bryant St., Cambridge, Mass. 1901.
HENRY MINOR HUXLEY, 1550 Monadnock Block, Chicago, Ill. 1902.
*JAMES HAZEN HYDE, 18 rue Adolphe Yvon, Paris, France. 1909.
Prof. HENRY HYVERNAT (Catholic Univ. of America), 3405 Twelfth St., N. E. (Brookland), Washington, D. C. 1889.
Prof. A. V. WILLIAMS JACKSON, Columbia University, New York, N. Y. (668 Riverside Drive). 1885.
JOHN DAY JACKSON, 86 Crown St., New Haven, Conn. 1905.
Prof. MORRIS JASTROW, (Univ. of Pennsylvania), 248 South 23d St., Philadelphia, Pa. 1886.
Rev. HENRY F. JENKS, Canton Corner, Mass. 1874.
Prof. JAMES RICHARD JEWETT, 5757 Lexington Ave., Chicago, Ill. 1887.
CHARLES JOHNSTON, 511 West 122d St., New York, N. Y. 1910.
Prof. CHRISTOPHER JOHNSTON (Johns Hopkins Univ.), 21 West 20th St., Baltimore, Md. 1889.

- ISHYA JOSEPH, 700 Park Ave., New York, N. Y. 1908.
 ARTHUR BERRIEDALE KEITH, Colonial Office, London, S. W., England. 1908.
 Prof. MAXIMILIAN L. KELLNER, Episcopal Theological School, Cambridge, Mass. 1886.
 Miss ELIZA H. KENDRICK, 45 Hunnewell Ave., Newton, Mass. 1896.
 Prof. CHARLES FOSTER KENT (Yale Univ.), 406 Humphrey St., New Haven, Conn. 1890.
 Prof. ROLAND G. KENT, University of Pennsylvania, Philadelphia, Pa. 1910.
 THOMAS W. KINGSMILL, Shanghai, China. 1909.
 Prof. GEORGE L. KITTREDGE (Harvard Univ.), 9 Hilliard St., Cambridge, Mass. 1899.
 Rev. GEORGE A. KOHUT, 781 West End Ave., New York, N. Y. 1894.
 Miss LUCIE KOHN, 1138 Madison Ave., New York, N. Y. 1907.
 Rev. Dr. M. G. KYLE, 1132 Arrow St., Frankford, Philadelphia, Pa. 1909.
 *Prof. CHARLES ROCKWELL LANMAN (Harvard Univ.), 9 Farrar St., Cambridge, Mass. 1876.
 C. S. LEAVENWORTH, care of Brown, Shipley & Co., 123 Pall Mall, London, England. 1900.
 LEVON J. K. LEVONIAN, Aintal, Turkey. 1909.
 Prof. CHARLES E. LITTLE (Vanderbilt Univ.), 19 Lindsley Ave., Nashville, Tenn. 1901.
 Prof. ENNO LITTMAN, Schweighäuser Str. 24ⁱⁱ, Strassburg i. Els., Germany. 1902.
 PERCIVAL LOWELL, 53 State St., Boston, Mass. 1893.
 Rev. FERDINAND LUGSCHEIDER, 38 Bleeker St., New York, N. Y. 1908.
 ALBERT HOWE LYBYER, Irving St., Cambridge, Mass. 1909.
 *BENJAMIN SMITH LYMAN, 708 Locust St., Philadelphia, Pa. 1871.
 Prof. DAVID GORDON LYON, Harvard Univ. Semitic Museum, Cambridge, Mass. 1882.
 ALBERT MORTON LYTGOE, Metropolitan Museum of Art, New York, N. Y. 1899.
 Prof. DUNCAN B. MACDONALD, Hartford Theological Seminary, Hartford, Conn. 1893.
 WILLIAM E. W. MACKINLAY, 1st Lieut. 11th U. S. Cavalry, Fort Ethan Allen, Vt. 1904.
 Dr. ALBERT A. MADSEN 22 Courtney Ave. Newburgh, N. Y. 1906.
 Prof. HERBERT W. MAGOUN, 70 Kirkland St., Cambridge, Mass. 1887.
 Prof. MAX L. MARGOLIS, 1519 Diamond St., Philadelphia, Pa. 1890.
 Prof. ALLAN MARQUAND, Princeton University, Princeton, N. J. 1888.
 Prof. WINFRED ROBERT MARTIN, Hispanic Society of America, West 156th St., New York, N. Y. 1889.
 ISAAC G. MATTHEWS (McMaster Univ.), 509 Brunswick Ave., Toronto, Canada. 1906.
 C. O. MAWSON, 64 West 144th St., New York, N. Y. 1910.
 WILLIAM MERRILL, West Newbury, Mass. 1910.
 J. RENWICK METHENY, "Druid Hill," Beaver Falls, Pa. 1907.
 MARTIN A. MEYER, 300 Hamilton St., Albany, N. Y. 1906.
 Dr. TRUMAN MICHELSON, R. F. D. 48, Ridgefield, Conn. 1899.

- Mrs. HELEN L. MILLION (*née* LOVELL), Hardin College, Mexico. Mo. 1892.
Prof. LAWRENCE H. MILLS (Oxford Univ.), 218 Iffley Road, Oxford, England. 1881.
Prof. EDWIN KNOX MITCHELL (Hartford Theol. Sem.), 57 Gillette St., Hartford, Conn. 1898.
ROLAND H. MODE, 5836 Drexel Ave., Chicago, Ill. 1906.
Prof. J. A. MONTGOMERY (P. E. Divinity School), 6806 Green St., Germantown, Pa. 1903.
Prof. GEORGE F. MOORE (Harvard Univ.), 3 Divinity Ave., Cambridge, Mass. 1887.
Dr. JUSTIN HARTLEY MOORE, 8 West 119th St., New York, N. Y. 1904.
*Mrs. MARY H. MOORE, 3 Divinity Ave., Cambridge, Mass. 1902.
CHARLES J. MORSE, 1825 Asbury Ave., Evanston, Ill. 1909.
Prof. EDWARD S. MORSE, Salem, Mass. 1894.
Rev. HANS K. MOUSSA, 316 Third St., Watertown, Wis. 1906.
Prof. W. MAX MUELLER, 4308 Market St., Philadelphia, Pa. 1905.
Mrs. ALBERT H. MUNSELL, 65 Middlesex Road, Chestnut Hill, Mass. 1908.
Dr. WILLIAM MUSS-ARNOLT, Public Library, Boston, Mass. 1887.
Rev. JAS. B. NIES, Care London City and Midland Bank, Threadneedle St., London, England. 1906.
Rev. WILLIAM E. NIES, Port Washington, Long Island, N. Y. 1908.
Rt. Rev. Mgr. DENNIS T. O'CONNELL, D.D. (Catholic Univ.), Washington, D. C. 1903.
Prof. HANNS OERTEL (Yale Univ.), 2 Phelps Hall, New Haven, Conn. 1890.
Dr. CHARLES J. OGDEN, 250 West 88th St., New York, N. Y. 1906.
Miss ELLEN S. OGDEN, St. Agnes School, Albany, N. Y. 1898.
Prof. SAMUEL G. OLIPHANT, Olivet College, Olivet, Mich. 1906.
ALBERT TENEYCK OLMSTEAD, Princeton Preparatory School, Princeton, N. J. 1909.
Prof. PAUL OLTRAMARE (Univ. of Geneva), Ave. de Bosquets, Servette, Genève, Switzerland. 1904.
*ROBERT M. OLYPHANT, 160 Madison Ave., New York, N. Y. 1861.
Dr. JOHN ORNE, 104 Ellery St., Cambridge, Mass. 1890.
Rev. Dr. CHARLES RAY PALMER, 562 Whitney Ave., New Haven, Conn. 1900.
Prof. LEWIS B. PATON, Hartford Theological Seminary, Hartford, Conn. 1894.
Prof. WALTER M. PATTON, Wesleyan Theological College, Montreal, Canada. 1903.
Dr. CHARLES PEABODY, 197 Brattle St., Cambridge, Mass. 1892.
Prof. ISMAR J. PERITZ, Syracuse University, Syracuse, N. Y. 1894.
Prof. EDWARD DELAVAN PERRY (Columbia Univ.), 542 West 114th St., New York, N. Y. 1879.
Rev. Dr. JOHN P. PETERS, 225 West 99th St., New York, N. Y. 1882.
WALTER PETERSEN, Bethany College, Lindsborg, Kansas. 1909.
Prof. DAVID PHILIPSON (Hebrew Union College), 3947 Beechwood Ave., Rose Hill, Cincinnati, O. 1889.
Dr. WILLIAM POPPER, University of California, Berkeley, Cal. 1897.
Prof. IRA M. PRICE, University of Chicago, Chicago, Ill. 1887.

- Prof. JOHN DYNELEY PRINCE (Columbia Univ.), Sterlington, Rockland Co., N. Y. 1888.
- GEORGE PAYN QUACKENBOS, 331 West 28th St., New York, N. Y. 1904.
- Prof. F. P. RAMSAY (S. W. Presbyterian Univ.), Clarksville, Tenn. 1889.
- Dr. GEORGE ANDREW REISNER, The Pyramids, Cairo, Egypt. 1891.
- BERNARD REVEL, 2113 North Camac St., Philadelphia, Pa. 1910.
- Prof. PHILIP M. RHINELANDER (Episcopal Theological Sem.), 26 Garden St., Cambridge, Mass. 1908.
- ERNEST C. RICHARDSON, Library of Princeton University, Princeton, N. J. 1900.
- J. NELSON ROBERTSON, 294 Avenue Road, Toronto, Ont. 1902
- EDWARD ROBINSON, Metropolitan Museum of Art, New York, N. Y. 1894.
- Rev. Dr. GEORGE LIVINGSTON ROBINSON (McCormick Thcol. Sem.), 4 Chalmers Place, Chicago, Ill. 1892.
- HOD. WILLIAM WOODVILLE ROCKHILL, American Embassy, St. Petersburg, Russia. 1880.
- Prof. JAMES HARDY ROPES (Harvard Univ.), 13 Follen St., Cambridge, Mass. 1893.
- Dr. WILLIAM ROSENAU, Johns Hopkins University, Baltimore, Md. 1897.
- Miss ADELAIDE RUDOLPH, 2098 East 100th St., Cleveland, O. 1894.
- Mrs. JANET E. RUTZ-REES, Rosemary Cottage, Greenwich, Conn. 1897.
- Miss CATHERINE B. RUNKLE, 15 Everett St., Cambridge, Mass. 1900.
- Prof. ARTHUR W. RYDER (Univ. of California), 2337 Telegraph Ave., Berkeley, Cal. 1902.
- Mrs. EDW. E. SALISBURY, 237 Church St., New Haven, Conn. 1906.
- Pres. FRANK K. SANDERS, Washburn College, Topeka, Kans. 1897.
- JOHANN F. SCHELTEMA, care of Messrs. Kerkhoven & Co., 115 Heerengracht, Amsterdam, Holland. 1906.
- GEORGE V. SCHICK, Johns Hopkins University, Baltimore, Md. 1909.
- Dr. H. ERNEST SCHMID, White Plains, N. Y. 1866.
- Prof. NATHANIEL SCHMIDT, Cornell University, Ithaca, N. Y. 1894.
- MONTGOMERY SCHUYLER, Jr., First Secretary of the American Embassy, St. Petersburg, Russia. 1899.
- GILBERT CAMPBELL SCOGGIN, University of Missouri, Columbia, Mo. 1906.
- Dr. CHARLES P. G. SCOTT, 1 Madison Ave., New York, N. Y. 1895.
- *Mrs. SAMUEL BRYAN SCOTT (*née* Morris), 124 Highland Ave., Chestnut Hill, Philadelphia, Pa. 1903.
- Rev. JOHN L. SCULLY, Church of the Holy Trinity, 312-332 East 88th St., New York, N. Y. 1908.
- Rev. Dr. WILLIAM G. SEIPLE, 78 Higashi Sambancho, Sendai, Japan. 1902.
- J. HERBERT SENTER, 10 Avon St., Portland, Maine. 1870.
- Prof. CHARLES N. SHEPARD (General Theological Sem.), 9 Chelsea Square, New York, N. Y. 1907.
- CHARLES C. SHERMAN, 614 Riverside Drive, New York, N. Y. 1904.
- *The Very Rev. JOHN R. SLATTERY, 261 Central Park West, New York, N. Y. 1903.
- Major (P. S.) C. C. SMITH, P. S. Manila, Philippine Islands. 1907.
- Prof. HENRY PRESERVED SMITH, Theological School, Meadville, Pa. 1877.
- Prof. JOHN M. P. SMITH, University of Chicago, Chicago, Ill. 1906.

- Prof. EDWARD H. SPIEKER, Johns Hopkins University, Baltimore, Md. 1884.
- Rev. JAMES D. SIEELE, 15 Grove Terrace, Passaic, N. J. 1892.
- Mrs. SARA YORKE STEVENSON, 237 South 21st St., Philadelphia, Pa. 1907.
- Rev. ANSON PHELPS STOKES, Jr., Yale University, New Haven, Conn. 1900.
- MAYER SULZBERGER, 1303 Girard Ave., Philadelphia, Pa. 1888.
- Prof. GEORGE SYERDRUP, Jr., Augsburg Seminary, Minneapolis, Minn. 1907.
- Prof. WILLIAM C. THAYER, Lehigh University, Bethlehem, Pa. 1907.
- EBEN FRANCIS THOMPSON, 311 Main St., Worcester, Mass. 1906.
- Rev. Dr. J. J. TIERNEY, Mount St. Mary's College, Emmitsburg, Md. 1901.
- Prof. HENRY A. TODD (Columbia Univ.), 824 West End Ave., New York, N. Y. 1885.
- OLAF A. TOFFTEEN, 2726 Washington Blvd., Chicago, Ill. 1906.
- *Prof. CHARLES C. TORREY (Yale Univ.), 67 Mansfield St., New Haven, Conn. 1891.
- Prof. CRAWFORD H. TOY (Harvard Univ.), 7 Lowell St., Cambridge, Mass. 1871.
- Rev. SYDNEY N. USSHER, St. Bartholomew's Church, 44th St. & Madison Ave., N. Y. 1909.
- Dr. FREDERICK AUGUSTUS VANDERBURGH, 53 Washington Sq., New York, N. Y. 1908.
- ADDISON VAN NAME (Yale Univ.), 121 High St., New Haven, Conn. 1863.
- Miss SUSAN HAYES WARD, The Stone House, Abington Ave., Newark, N. J. 1874.
- Rev. Dr. WILLIAM HAYES WARD, 130 Fulton St., New York, N. Y. 1869.
- Miss CORNELIA WARREN, Cedar Hill, Waltham, Mass. 1894.
- Prof. WILLIAM F. WARREN (Boston Univ.), 131 Davis Ave., Brookline, Mass. 1877.
- Rev. W. SCOTT WATSON, West New York, Hudson Co., New Jersey. 1893
- Prof. J. E. WERREN, 17 Leonard Ave., Cambridge, Mass. 1894.
- Prof. JENS IVERSON WESTENGARD (Harvard Univ.), Asst. Gen. Adviser to H.S.M. Govt., Bangkok, Siam. 1903.
- Pres. BENJAMIN IDE WHEELER, University of California, Berkeley, Cal. 1885.
- Prof. JOHN WILLIAMS WHITE (Harvard Univ.), 18 Concord Ave., Cambridge Mass. 1877.
- *Miss MARGARET DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1908.
- Mrs. WILLIAM DWIGHT WHITNEY, 227 Church St., New Haven, Conn. 1897.
- Rev. E. T. WILLIAMS, Division of Far Eastern Affairs, Department of State. Washington, D. C. 1901.
- Prof. FREDERICK WELLS WILLIAMS (Yale Univ.), 135 Whitney Ave., New Haven, Conn. 1895.
- Dr. TALCOTT WILLIAMS ("The Press"), 916 Pine St., Philadelphia, Pa. 1884.
- Rev. Dr. WILLIAM COPLEY WINSLOW, 525 Beacon St., Boston, Mass. 1885.
- Rev. Dr. STEPHEN S. WISE, 23 West 90th St., New York, N. Y. 1894.

- HENRY B. WITTON, Inspector of Canals, 16 Murray St., Hamilton, Ontario. 1885.
 DR. LOUIS B. WOLFENSON, 1228 Mound St., Madison, Wis. 1904.
 WILLIAM W. WOOD, 2210 North Fulton Ave., Baltimore. Md. 1900.
 JAMES H. WOODS (Harvard Univ.), 2 Chestnut St., Boston, Mass. 1900.
 DR. WILLIAM H. WORRELL, University of Michigan, Ann Arbor, Mich. 1910.
 REV. JAMES OWENS WRIGHTSON, 812 20th St., N. W., Washington, D. C. 1903.
 REV. DR. ABRAHAM YOHANNAN, Columbia University, New York, N. Y. 1894.

[Total, 286.]

III. MEMBERS OF THE SECTION FOR THE HISTORICAL STUDY OF RELIGIONS.

- REV. DR. SAMUEL H. BISHOP, 500 West 122d St., New York, N. Y. 1898.
 REV. JOHN L. CHANDLER, Madura, Southern India. 1899.
 SAMUEL DICKSON, 901 Clinton St., Philadelphia, Pa. 1899.
 PROF. FRANKLIN GIDDINGS, Columbia Univ., New York, N. Y. 1900.
 PROF. ARTHUR L. GILLET, Hartford Theological Seminary, Hartford, Conn. 1898.
 PROF. CHARLES B. GULICK (Harvard University), 59 Fayerweather st., Cambridge, Mass. 1899.
 PROF. GEORGE T. LADD (Yale Univ.), 204 Prospect St., New Haven, Conn. 1898.
 M. A. LANE, 451 Jackson Blvd., Chicago, Ill. 1907.
 PROF. FRED NORRIS ROBINSON (Harvard Univ.), Longfellow Park, Cambridge, Mass. 1900.
 REV. W. A. SHEDD, Am. Mission, Urumia, Persia (via Berlin and Tabriz). 1906.
 PRES. LANGDON C. STEWARDSON, Hobart College, Geneva, N. Y. 1901.
 PROF. R. M. WENLEY, University of Michigan, Ann Arbor, Mich. 1898.
 REV. G. E. WHITE, Anatolia College, Marsovan, Turkey [Papers to German Consulate (White), Samsoun, Turkey.] 1906.
 PROF. IRVING F. WOOD, Smith College, Northampton, Mass. 1905.

[Total, 14.]

Number of Members of all Classes, 326.

CHRONOLOGICAL LIST OF LIVING MEMBERS.

(The names of HONORARY MEMBERS are printed in large Capitals and (hon.) is placed after their names; the names of *Members of the Section for the Historical Study of Religions* are printed Italics and (S. S. R.) is placed after their names.)

- 1857 W. W. GOODWIN. 1858 B. L. GILDERSLEEVE.
 1861 R. M. OLYPHANT. 1863 A. VAN NAME. 1866 H. E. SCHMID. 1867 D. S. DODGE. 1869 T. W. HIGGINSON; W. H. WARD.
 1870 J. H. SENTER. 1871 B. S. LYMAN; C. H. TOY. 1872 M. W. EASTON.

- 1873 F. CARTER; A. K. HUMPHREY. 1874 H. F. JENKS; S. H. WARD.
 1876 H. FERGUSON; C. R. LANMAN. 1877 H. P. SMITH; W. F. WARREN;
 J. W. WHITE. 1878 B. DELBRÜCK (hon.); T. NOELDEKE (hon.).
 1879 C. A. BRIGGS; S. HART; E. D. PERRY.
- 1880 W. W. ROCKHILL. 1881 M. BLOOMFIELD; F. BROWN; E. W. HOPKINS;
 L. H. MILLS. 1882 G. W. COLLES; D. G. LYON; J. P. PETERS. 1883
 E. CHANNING; L. H. ELWELL; P. HAUPT. 1884 C. ADLER; E. H. SPIEKER;
 T. WILLIAMS. 1885 A. V. W. JACKSON; H. A. TODD; B. I. WHEELER;
 W. C. WINSLOW; H. B. WITTON. 1886 C. DEF. FITZ-GERALD; R. J.
 H. GOTTHEIL; R. F. HARPER; M. JASTROW; M. L. KELLNER. 1887
 R. G. BHANDARKAR (hon.); J. BINNEY; H. COLLITZ; H. V.
 HILPRECHT; J. R. JEWETT; H. W. MAGOUN; G. F. MOORE; W. MUSS-
 ARNOLT; I. M. PRICE; E. SACHAU (hon.). 1888 G. A. BARTON;
 J. D. DAVIDS; E. W. FAY; A. MARQUAND; J. D. PRINCE; M. SULZBERGER.
 1889 H. HYVERNAT; CHRISTOPHER JOHNSTON; W. E. MARTIN; D.
 PHILIPSON; E. P. RAMSAY.
- 1890 L. GROSSMANN; C. F. KENT; M. L. MARGOLIS; H. OERTEL; J. ORNE;
 E. WINDISCH (hon.). 1891 D. BLAUSTEIN; J. H. BREASTED; F. D.
 CHESTER; G. A. REISNER; C. C. TORREY. 1892 C. D. BUCK; S. J.
 CARR; J. R. FRAME; H. H. HAYNES; H. L. MILLION; C. PEABODY;
 G. L. ROBINSON; J. D. STEELE. 1893 W. R. ARNOLD; J. F. BERG;
 I. M. CASANOWICZ; F. DELITZSCH (hon.); I. GUIDI (hon.);
 H. KERN (hon.); A. F. R. HOENRNLE; P. LOWELL; D. B. MAC
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 I. J. PERITZ; E. ROBINSON; A. RUDOLPH; N. SCHMIDT; C. WARREN;
 J. E. WERREN; S. S. WISE; A. YOHANNAN. 1895 C. P. G. SCOTT;
 F. W. WILLIAMS. 1896 G. M. BOLLING; J. CAMPBELL; E. S. COLTON;
 E. H. KENDRICK. 1897 A. BOISSIER; P. CARUS; W. M. ELLICOTT;
 W. H. FURNESS; L. H. GRAY; W. POPPER; W. ROSENAU; J. E.
 RUTZ-REES; F. K. SANDERS; W. D. WHITNEY. 1898 S. E. BALDWIN;
 A. BARTH (hon.); H. P. BEACH; *S. H. Bishop* (S. S. R.); F. J.
 BLISS; *A. L. Gillett* (S. S. R.); *G. T. Ladd* (S. S. R.); A. LUDWIG
 (hon.); G. MASPERO (hon.); E. K. MITCHELL; E. S. OGDEN; *R. M.*
Wenley (S. S. R.). 1899 J. BURGESS (hon.); *J. L. Chandler* (S. S. R.);
S. Dickson (S. S. R.); *C. B. Gulick* (S. S. R.); H. W. HOFFMAN;
 G. L. KITTREDGE; A. M. LYTHGOE; T. MICHELSON; M. SCHUYLER JR.
- 1900 J. E. ABBOTT; W. J. BEECHER; F. R. BLAKE; C. A. BLOMGREN;
 A. L. P. DENNIS; A. H. EWING; J. C. FERGUSON; T. C. FOOTE;
F. Giddings (S. S. R.); C. S. LEAVENWORTH; C. R. PALMER; E. C.
 RICHARDSON; *F. N. Robinson* (S. S. R.); C. B. RUNKLE; A. P. STOKES;
 W. W. WOOD; J. H. WOOD. 1901 F. C. EISELEN; C. P. FAGNANI;
 M. I. HUSSEY; C. E. LITTLE; *L. C. Stewardson* (S. S. R.); J. J.
 TIERNEY; E. T. WILLIAMS. 1902 W. M. CRANE; A. EMBER; R. GARBE
 (hon.); C. C. HANSEN; H. M. HUYLEY; E. LITTMAN; M. H. MOORE;
 J. N. ROBERTSON; A. W. RYDER; W. G. SEIPLE; J. WELLHAUSEN
 (hon.). 1903 L. C. BARRET; A. ERMAN (hon.); R. GARRET; G. C. O.
 HAAS; F. HIRSH; C. T. HOCK; J. A. MONTGOMERY; D. T. O'CONNELL;

W. M. PATTON; S. B. SCOTT; J. R. SLATTERY; J. I. WESTENGARD;
 J. O. WRIGHTSON. 1904 F. S. ALLEN; K. ASAKAWA; C. W. CURRIER;
 I. FRIEDLAENDER; E. W. M. GRANT; W. E. W. MACKINLAY; J. H.
 MOORE; P. OLTRAMARE; G. P. QUACKENBOS; C. C. SHERMAN; L. B.
 WOLFENSON. 1905 C. E. CONANT; R. H. FERRIS; C. S. FISHER;
 F. GARDNER; K. F. GELDNER (hon.); G. A. GRIERSON (hon.)
 J. D. JACKSON; W. MAX MUELLER; *I. F. Wood* (S. S. R.). 1906 H. H.
 BENDER; F. B. BLODGETT; C. A. B. BROCKWELL; W. E. CLARK; W. B.
 FLEMING; I. GOLDZIHNER (hon.); F. A. GRAGG; P. V. HARPER;
 F. W. HOOPER; A. A. MADSEN; I. G. MATTHEWS; M. A. MEYER;
 R. H. MODE; H. K. MOUSSA; J. B. NIES; C. J. OGDEN; S. G. OLIPHANT;
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 (S. S. R.); J. M. P. SMITH; E. F. THOMPSON; C. A. TOFFTEEN; *G. E.*
White (S. S. R.). 1907 J. C. AYER; A. M. BACON; G. R. BERRY;
 J. A. BEWER; G. F. BLACK; P. BLANC; A. T. CLAY; H. E. W. FOS-
 BROOKE; A. FRABASILIS; L. J. FRACHTENBERG; E. GRANT; L. H. GRAY;
 W. M. GROTON; W. J. HINKEL; H. R. HOWLAND; L. KOHN; *M. A. Lane*
 (S. S. R.); J. R. METHENY; T. W. RHYS-DAVIDS (hon.); C. N.
 SHEPARD; C. C. SMITH; S. Y. STEVENSON; G. SVEDDRUP; W. G. THAYER.
 1908 R. BRANDSTETTER; H. H. BUCK; H. C. BUTLER; A. S. COCHRAN;
 W. R. P. DAVEY; H. S. DAVIDSON; I. JOSEPH; A. B. KEITH; F. LUG-
 SCHEIDER; E. MEYER (hon.); A. H. MUNSELL; W. E. NIES; P. M.
 RHINELANDER; J. L. SCULLY; E. SENART (hon.); F. A. VANDER-
 BURGH; M. D. WHITNEY. 1909 G. W. BROWN; C. D. BURRAGE;
 C. CLERMONT-GANNEAU (hon.); I. C. DEMAREST; S. R. DRIVER
 (hon.); C. FRANK; H. FRIEDENWALD; M. GELBACK; L. HAESSLER;
 E. H. HUME; J. H. HYDE; H. JACOBI (hon.); T. W. KINGSMILL;
 M. G. KYLE; L. J. K. LEVONIAN; A. H. LYBYER; C. J. MORSE; A. T.
 OLMSTEAD; W. PETERSON; G. V. SCHICK; S. N. USSHER. 1910 E. M.
 AITKEN; C. B. BRADLEY; A. H. BULLOCK; E. W. BURLINGAME; F. A.
 CUNNINGHAM; F. EDGERTON; S. F. HOYT; CHARLES JOHNSTON; R. G.
 KENT; C. O. MAWSON; W. MERRILL; H. OLDENBERG (hon.);
 B. REVEL; W. H. WORRELL.

SOCIETIES AND LIBRARIES, TO WHICH THE PUBLICATIONS OF
 THE AMERICAN ORIENTAL SOCIETY ARE SENT BY WAY OF GIFT,
 EXCHANGE, OR PURCHASE.

I. AMERICA.

BOSTON, MASS.: American Academy of Arts and Sciences.

CHICAGO, ILL.: Field Museum of Natural History.

NEW YORK: American Geographical Society.

PHILADELPHIA, PA.: American Philosophical Society.

Free Museum of Science and Art, Univ. of Penna.

WASHINGTON, D. C.: Smithsonian Institution.

Bureau of American Ethnology.

WORCESTER, MASS.: American Antiquarian Society.

II. EUROPE.

- AUSTRIA, VIENNA: Kaiserliche Akademie der Wissenschaften.
K. u. K. Kaiserliche Direction der K. u. K. Hofbibliothek.
(Josephsplatz 1.)
Anthropologische Gesellschaft.
- PRAGUE: Königlich Böhmisches Gesellschaft der Wissenschaften.
- DENMARK, ICELAND, REYKJAVIK: University Library.
- FRANCE, PARIS: Société Asiatique. (Rue de Seine, Palais de l'Institut.)
Bibliothèque Nationale.
Musée Guimet. (Avenue du Trocadéro.)
Académie des Inscriptions et Belles-Lettres.
École des Langues Orientales Vivantes. (Rue de Lille, 2.)
- GERMANY, BERLIN: Königlich Preussische Akademie der Wissenschaften.
Königliche Bibliothek.
Seminar für Orientalische Sprachen. (Am Zeughaus 1.)
- DARMSTADT: Grossherzogliche Hofbibliothek.
- GÖTTINGEN: Königliche Gesellschaft der Wissenschaften.
- HALLE: Bibliothek der Deutschen Morgenländischen Gesellschaft.
(Friedrichstrasse 50.)
- LEIPZIG: Königlich Sächsische Gesellschaft der Wissenschaften.
Leipziger Semitistische Studien. (J. C. Hinrichs.)
- MUNICH: Königlich Bayerische Akademie der Wissenschaften.
Königliche Hof- und Staatsbibliothek.
- TÜBINGEN: Library of the University.
- GREAT BRITAIN, LONDON: Royal Asiatic Society of Great Britain and Ireland. (22 Albemarle St., W.)
Library of the India Office. (Whitehall, SW.)
Society of Biblical Archaeology. (37 Great Russell St., Bloomsbury, W.C.)
Philological Society. (Care of Dr. F. J. Furnival, 3 St. George's Square, Primrose Hill, NW.)
- ITALY, BOLOGNA: Reale Accademia delle Scienze dell' Istituto di Bologna.
- FLORENCE: Società Asiatika Italiana.
- ROME: Reale Accademia dei Lincei.
- NETHERLANDS, AMSTERDAM: Koninklijke Akademie van Wetenschappen.
- THE HAGUE: Koninklijk Instituut voor Taal-, Land-, en Volkenkunde van Nederlandsch Indië.
- LEYDEN: Curatorium of the University.
- RUSSIA, HELSINGFORS: Société Finno-Ougrienne.
- ST. PETERSBURG: Imperatorskaja Akademija Nauk.
Archeologiji Institut.
- SWEDEN, UPSALA: Humanistiska Vetenskaps-Samfundet.

III. ASIA.

- BENARES: Benares Sanskrit Coll. "The Pandit."
- CALCUTTA, GOV'T OF INDIA: Home Department.
- CEYLON, COLOMBO: Ceylon Branch of the Royal Asiatic Society.

- CHINA, SHANGHAI: China Branch of the Royal Asiatic Society.
 TONKIN: l'École Française d'extrême Orient (Rue de Coton), Hanoi.
 INDIA, BOMBAY: Bombay Branch of the Royal Asiatic Society.
 The Anthropological Society. (Town Hall.)
 CALCUTTA: The Asiatic Society of Bengal. (57 Park St.)
 The Buddhist Text Society. (86 Jaun Bazar St.)
 LAHORE: Library of the Oriental College.
 SIMLA: Office of the Director General of Archaeology. (Benmore, Simla, Punjab.)
 JAPAN, TOKYO: The Asiatic Society of Japan.
 JAVA, BATAVIA: Bataviaasch Genootschap van Kunsten en Wetenschappen.
 KOREA: Korea Branch of the Royal Asiatic Society, Seoul, Korea.
 NEW ZEALAND: The Polynesian Society, New Plymouth.
 PHILIPPINE ISLANDS: The Ethnological Survey, Manila.
 SYRIA: The American School (care U. S. Consul, Jerusalem).
 Revue Biblique, care of M. J. Lagrange, Jerusalem.
 Al-Machriq, Université St. Joseph, Beirut, Syria.

IV. AFRICA.

- EGYPT, CAIRO: The Khedivial Library.

V. EDITORS OF THE FOLLOWING PERIODICALS.

- The Indian Antiquary (Education Society's Press, Bombay, India).
 Wiener Zeitschrift für die Kunde des Morgenlandes (care of Alfred Hölder, Rothenthurmstr. 15, Vienna, Austria).
 Zeitschrift für vergleichende Sprachforschung (care of Prof. E. Kuhn, 3 Hess Str., Munich, Bavaria).
 Revue de l'Histoire des Religions (care of M. Jean Réville, chez M. E. Leroux, 28 rue Bonaparte, Paris, France).
 Zeitschrift für die alttestamentliche Wissenschaft (care of Prof. D. Karl Marti, Marienstr. 25, Bern, Switzerland).
 Beiträge zur Assyriologie und semitischen Sprachwissenschaft. (J. C. Hinrichs'sche Buchhandlung, Leipzig, Germany)
 Orientalische Bibliographie (care of Prof. Lucian Scherman, 18 Ungerer Str., Munich, Bavaria).
 The American Antiquarian and Oriental Journal, 438 East 57th St., Chicago, Ill.
 American Journal of Archaeology, 65 Sparks St., Cambridge, Mass.
 Transactions of the American Philological Association (care of Prof. F. G. Moore, Trinity College, Hartford, Conn.).
 Le Monde Oriental (care of Prof. K. F. Johansson, Upsala, Sweden).

VI. LIBRARIES.

The Editors request the Librarians of any Institution or Libraries, not mentioned below, to which this Journal may regularly come, to notify them of the fact. It is the intention of the Editors to print a list, as

complete as may be, of regular subscribers for the Journal or of recipients thereof. The following is the beginning of such a list.

Andover Theological Seminary.

Boston Public Library.

Brown University Library.

Buffalo Society of Natural Science, Library Building, Buffalo, N. Y.

Chicago University Library.

Columbia University Library.

Cornell University Library.

Harvard Sanskrit Class-Room Library.

Harvard Semitic Class-Room Library.

Harvard University Library.

Nebraska University Library.

New York Public Library.

Yale University Library.

Recipients: 326 (Members) + 75 (Gifts and Exchanges) + 13 (Libraries) = 414.

CONSTITUTION AND BY-LAWS
OF THE
AMERICAN ORIENTAL SOCIETY.

With Amendments of April, 1897.

CONSTITUTION.

ARTICLE I. This Society shall be called the AMERICAN ORIENTAL SOCIETY.

ARTICLE II. The objects contemplated by this Society shall be: —

1. The cultivation of learning in the Asiatic, African, and Polynesian languages, as well as the encouragement of researches of any sort by which the knowledge of the East may be promoted.

2. The cultivation of a taste for oriental studies in this country.

3. The publication of memoirs, translations, vocabularies, and other communications, presented to the Society, which may be valuable with reference to the before-mentioned objects.

4. The collection of a library and cabinet.

ARTICLE III. The members of this Society shall be distinguished as corporate and honorary.

ARTICLE IV. All candidates for membership must be proposed by the Directors, at some stated meeting of the Society, and no person shall be elected a member of either class without receiving the votes of as many as three-fourths of all the members present at the meeting.

ARTICLE V. The government of the Society shall consist of a President, three Vice Presidents, a Corresponding Secretary, a Recording Secretary, a Secretary of the Section for the Historical Study of Religions, a Treasurer, a Librarian, and seven Directors, who shall be annually elected by ballot, at the annual meeting.

ARTICLE VI. The President and Vice Presidents shall perform the customary duties of such officers, and shall be *ex-officio* members of the Board of Directors.

ARTICLE VII. The Secretaries, Treasurer, and Librarian shall be *ex-officio* members of the Board of Directors, and shall perform their respective duties under the superintendence of said Board.

ARTICLE VIII. It shall be the duty of the Board of Directors to regulate the financial concerns of the Society, to superintend its publications, to carry into effect the resolutions and orders of the Society, and to exercise a general supervision over its affairs. Five Directors at any regular meeting shall be a quorum for doing business.

ARTICLE IX. An Annual meeting of the Society shall be held during Easter week, the days and place of the meeting to be determined by the Directors, said meeting to be held in Massachusetts at least once in three years. One or more other meetings, at the discretion of the Directors,

may also be held each year at such place and time as the Directors shall determine.

ARTICLE X. There shall be a special Section of the Society, devoted to the historical study of religions, to which section others than members of the American Oriental Society may be elected in the same manner as is prescribed in Article IV.

ARTICLE XI. This Constitution may be amended, on a recommendation of the Directors, by a vote of three-fourths of the members present at an annual meeting.

BY-LAWS.

I. The Corresponding Secretary shall conduct the correspondence of the Society, and it shall be his duty to keep, in a book provided for the purpose, a copy of his letters; and he shall notify the meetings in such manner as the President or the Board of Directors shall direct.

II. The Recording Secretary shall keep a record of the proceedings of the Society in a book provided for the purpose.

III. *a.* The Treasurer shall have charge of the funds of the Society; and his investments, deposits, and payments shall be made under the superintendence of the Board of Directors. At each annual meeting he shall report the state of the finances, with a brief summary of the receipts and payments of the previous year.

III. *b.* After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. *c.* At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

IV. The Librarian shall keep a catalogue of all books belonging to the Society, with the names of the donors, if they are presented, and shall at each annual meeting make a report of the accessions to the library during the previous year, and shall be farther guided in the discharge of his duties by such rules as the Directors shall prescribe.

V. All papers read before the Society, and all manuscripts deposited by authors for publication, or for other purposes, shall be at the disposal of the Board of Directors, unless notice to the contrary is given to the Editors at the time of presentation.

VI. Each corporate member shall pay into the treasury of the Society an annual assessment of five dollars; but a donation at any one time of seventy-five dollars shall exempt from obligation to make this payment.

VII. Corporate and Honorary members shall be entitled to a copy of all the publications of the Society issued during their membership, and

shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price.

VIII. Candidates for membership who have been elected by the Society shall qualify as members by payment of the first annual assessment within one month from the time when notice of such election is mailed to them. A failure so to qualify shall be construed as a refusal to become a member. If any corporate member shall for two years fail to pay his assessments, his name may, at the discretion of the Directors, be dropped from the list of members of the Society.

IX. Members of the Section for the Historical Study of Religions shall pay into the treasury of the Society an annual assessment of two dollars; and they shall be entitled to a copy of all printed papers which fall within the scope of the Section.

X. Six members shall form a quorum for doing business, and three to adjourn.

SUPPLEMENTARY BY-LAWS.

I. FOR THE LIBRARY.

1. The Library shall be accessible for consultation to all members of the Society, at such times as the Library of Yale College, with which it is deposited, shall be open for a similar purpose; further, to such persons as shall receive the permission of the Librarian, or of the Librarian or Assistant Librarian of Yale College.

2. Any member shall be allowed to draw books from the Library upon the following conditions: he shall give his receipt for them to the Librarian, pledging himself to make good any detriment the Library may suffer from their loss or injury, the amount of said detriment to be determined by the Librarian, with the assistance of the President, or of a Vice President; and he shall return them within a time not exceeding three months from that of their reception, unless by special agreement with the Librarian this term shall be extended.

3. Persons not members may also, on special grounds, and at the discretion of the Librarian, be allowed to take and use the Society's books, upon depositing with the Librarian a sufficient security that they shall be duly returned in good condition, or their loss or damage fully compensated.

Until further notice the

Publications of the American Oriental Society

will be sold as follows:

1. Members of the Society receive the current number of the Society's Journal free of charge.

2. To those who are not members of the Society the price of the current volume is six dollars, carriage to be paid by the purchaser.

3. The back volumes of the Journal will be sold separately as follows:

*Vol. I (1843-1849)	\$25	Vol. XVI (1894-1896) ...	\$ 6
Vol. II (1851)	5	Vol. XVII (1896)	4
Vol. III (1852-1853)	5	Vol. XVIII (1897)	6
Vol. IV (1853-1854)	5	Vol. XIX (1898)	6
Vol. V (1855-1856)	5	Vol. XX (1899)	6
*Vol. VI (1860)	20	Vol. XXI (1900)	6
Vol. VII (1862)	6	Vol. XXII (1901)	6
Vol. VIII (1866)	8	Vol. XXIII (1902)	6
Vol. IX (1871)	8	Vol. XXIV (1903)	6
Vol. X (1872-1880)	8	Vol. XXV (1904)	6
Vol. XI (1882-1885)	6	Vol. XXVI (1905)	6
Vol. XII (1881)	6	Vol. XXVII (1906)	6
Vol. XIII (1889)	8	Vol. XXVIII (1907)	6
Vol. XIV (1890)	6	Vol. XXIX (1908-1909)	5
Vol. XV (1893)	6	Vol. XXX (1909-1910)	6

* Only a very limited number of volumes I and VI can be sold separately.

4. A discount of 20 per cent. will be allowed to public libraries and to the libraries of educational institutions.

5. A limited number of complete sets (vol. I—vol. XXX) will be sold at the price of \$180, carriage to be paid by the purchaser.

6. The following separate prints are for sale:

H. G. O. Dwight. Catalogue of works in the Armenian language prior to the seventeenth century	\$5.00
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Burgess, Sūrya-Siddhanta	8.00
Paspatis, Memoir on the language of the Gypsies in the Turkish Empire	5.00
L. H. Gulick, Panape Dialect	2.50
Whitney's Tāittiriya-Prāṭicākhya	6.00
Avery's Sanskrit-Verb-Inflection	3.00
Whitney's Index Verborum to the Atharva-Veda ..	6.00
The same on large paper	8.00
Hopkins's Position of the Ruling Caste	5.00
Oertel's Jāiminiya-Upaniṣad-Brāhamāṇa ..	2.50
Arnold's Historical Vedic Grammar	2.50
Bloomfield's Kāuṣika-Sūtra of the Atharva-Veda	8.00
The Whitney Memorial volume	3.00

7. Beginning with volume XXX the Journal appears in four quarterly parts of which the first is issued on December first, the second on March first, the third on June first, and the fourth on September first. Single parts of the Journal cannot be sold.

All communications concerning the Library should be addressed to HANNS OERTEL, 2 Phelps Hall, Yale University, New Haven, Conn., U. S. A.

TO CONTRIBUTORS.

Fifty copies of each article published in this Journal will be forwarded to the author. A larger number will be furnished at cost.

GENERAL NOTICES.

1. Members are requested to give immediate notice of changes of address to the Treasurer, Prof. Frederick Wells Williams, 135 Whitney avenue, New Haven, Conn.

2. It is urgently requested that gifts and exchanges intended for the Library of the Society be addressed as follows: The Library of the American Oriental Society, Yale University New Haven, Connecticut, U. S. America.

3. For information regarding the sale of the Society's publications see the next foregoing page.

4. Communications for the Journal should be sent to Prof. James Richard Jewett, University of Chicago, Chicago, Ill., or Prof. Hanns Oertel, Yale University, New Haven, Conn.

CONCERNING MEMBERSHIP.

It is not necessary for any one to be a professed Orientalist in order to become a member of the Society. All persons—men or women—who are in sympathy with the objects of the Society and willing to further its work are invited to give it their help. This help may be rendered by the payment of the annual assessments, by gifts to its library, or by scientific contributions to its Journal, or in all of these ways. Persons desiring to become members are requested to apply to the Treasurer, whose address is given above. Members receive the Journal free. The annual assessment is \$5. The fee for Life-Membership is \$75.

Persons interested in the Historical Study of Religions may become members of the Section of the Society organized for this purpose. The annual assessment is \$2; members receive copies of all publications of the Society which fall within the scope of the Section.

PROCEEDINGS
OF THE
AMERICAN ORIENTAL SOCIETY,
AT ITS
MEETING IN BALTIMORE, MD.

1910.

The annual meeting of the Society, being the one hundred twenty-second occasion of its assembling, was held in Baltimore, Md., at the Johns Hopkins University, on Thursday, Friday, and Saturday of Easter week, March 31st and April 1st and 2d.

The following members were present at one or more of the sessions :

Barret,	Davidson.	Hyvernat.	Quackenbos,
Blake,	Edgerton,	Jastrow,	Rosenau.
Bloomfield.	Ember,	Kent. R. G.	Rudolph, Miss
Bolling,	Foote,	Kyle.	Schick,
Brown, F.	Gildersleeve,	Lyon,	Steele,
Brown, G. W.	Grieve, Miss	Margolis.	Torrey.
Burlingame.	Haas.	Meyer. E.	Vanderburgh,
Casanowicz,	Harper, R. F.	Michelson,	Ward, W. H.
Clay,	Haupt,	Montgomery.	Yohannan.
Collitz,	Haynes,	Müller.	
Conant,	Hopkins,	Muss-Arnolt.	Total: 45.
Currier,	Hussey, Miss	Oertel,	

The first session began on Thursday afternoon at three o'clock in the Donovan Room, McCoy Hall, with the President, Dr. Wm. Hayes Ward, in the chair. In the absence of both the secretaries Dr. George C. O. Haas was appointed to act as recording secretary for the meeting.

The reading of the minutes of the meeting in New York,

April 15th, 16th, and 17th, 1909, was dispensed with, because they had already been printed in the Journal (vol. 30, p. i-xii).

The Committee of Arrangements presented its report, through Professor Haupt, in the form of a printed program. The succeeding sessions were appointed for Friday morning at half past nine, Friday afternoon at half past two, and Saturday morning at half past nine. It was announced that a luncheon would be given to the Society by the University at the Johns Hopkins Club on Friday at one o'clock, and that arrangements had been made for a subscription dinner at the same place on Friday evening at seven o'clock. The Johns Hopkins Club and the University Club extended their courtesies to the members of the Society during the meeting.

REPORT OF THE CORRESPONDING SECRETARY.

The annual report of the Corresponding Secretary, Professor A. V. Williams Jackson, was then presented as follows:

The Secretary has the honor to report that he has endeavoured to carry on the duties of his office during the current year as before, and has had pleasant correspondence, not only with the newly elected members, honorary and corporate, but also with various persons who take an interest in Oriental matters and have been attracted by the aims of the Society. A special phase of the correspondence is represented by letters to and from one engaged in writing a report for a Japanese publication on the history of learned organizations in America. Several communications have been received requesting the Society to consider different cities from those where it has met in the past, as places for the annual meeting. Most noteworthy among these is an invitation from the Conventions Bureau of the Business Men's League of St. Louis, accompanied by letters from the Governor of Missouri, the Mayor of St. Louis, and a number of local civic bodies.

The Secretary has to record the loss of several members whose names have added honor to our list.

DEATHS.

HONORARY MEMBER.

Professor M. J. De Goeje.

CORPORATE MEMBERS.

Mr. Henry Charles Lea.
Miss Maria Whitney.

Professor M. J. De Goeje, of the University of Leyden, who died in May, 1909, was elected to honorary membership in 1898 as a representative of Dutch scholarship and in recognition of his distinguished con-

tributions in the field of Semitic philology, especially Arabic, which are too well known to need record here.

Mr. Henry C. Lea, of Philadelphia, who had been a member of the Society since 1898, died in October 1909. He was a zealous furtherer of scholarship, historical and antiquarian, and the author of numerous works on mediaeval history.

Miss Maria Whitney, sister of the late Professor W. D. Whitney, died in January last. She joined the Society in 1897.

The Secretary cannot close this report without a word of appreciation of the help he has received from his Baltimore colleagues on the Committee of Arrangements (Professors Bloomfield and Haupt) in arranging the details of the meeting at which this report is presented.

REPORT OF THE TREASURER.

The annual report of the Treasurer, Professor F. W. Williams, was then presented, as follows:

RECEIPTS AND DISBURSEMENTS BY THE TREASURER OF THE AMERICAN ORIENTAL SOCIETY FOR THE YEAR ENDING DEC. 31, 1909.

Receipts.

Balance from old account, Dec. 31, 1908		\$ 488.00
Dues (190) for 1909	\$ 950.00	
„ (43) for other years	214.88	
„ (15) for His. Stud. of Relig. Section	30.00	1,194.88
Life Membership payment		75.00
State National Bank Dividends		124.97
Annual interest from Savings Banks		42.92
Sales of Journal		408.52
		<u>\$ 2,334.29</u>

Expenditures.

T. M. and T. Co., Printing Vol. xxiv and sundry	\$ 1,357.80
Editor's Honorarium	100.00
Librarian, Scribe and Postage	64.50
Treasurer, Postage	1.00
Subvention to Orientalische Bibliographie	95.95
Balance to general account	715.04
	<u>\$ 2,334.29</u>

STATEMENT.

	1908	1909
Bradley Type Fond	\$ 2,653.41	\$ 2,781.29
Cotheal Fund	1,000.00	1,000.00
State National Bank Shares	1,950.00	1,950.00
Connecticut Savings Bank	6.39	6.64
National Savings Bank	12.11	12.89
Interest, Cotheal Fund	195.69	237.88
Cash in hand	12.54	24.69
	<u>\$ 5,830.14</u>	<u>\$ 6,013.09</u>

REPORT OF THE AUDITING COMMITTEE.

The report of the Auditing Committee, Professors Torrey and Oertel, was presented by Professor Oertel, as follows:

We hereby certify that we have examined the account book of the Treasurer of this Society and have found the same correct, and that the foregoing account is in conformity therewith. We have also compared the entries in the cash book with the vouchers and bank and pass books and have found all correct.

CHARLES C. TORREY, } *Auditors.*
HANNS OERTEL, }

NEW HAVEN, March 23. 1910.

REPORT OF THE LIBRARIAN.

The Librarian, Professor Hanns Oertel, presented his report as follows:

The library was unfortunate in losing the help this year which Miss Margaret D. Whitney has very generously given the last three years. As a consequence the accessioning had to be done by paid labor, and it was through the kindness of my fellow editor, who allowed his honorarium to be used to defray this expense, that this work could be carried on. However, it will be necessary to provide hereafter a regular appropriation for the librarian to pay for the labor of accessioning and acknowledging; the work of binding has been entirely discontinued owing to lack of funds. It will be impossible to continue for any length of time a policy which is sure to result in confusion and loss, and the Librarian again wishes to impress upon the members of the Society the absolute necessity of a regular allowance for the payment of clerical help.

This report was completed when the Librarian received the sum of one hundred dollars from Professor Jewett as a second most welcome gift toward the expenses of the library.

Upon motion it was voted to convey the thanks of the Society to Professor Jewett for his two gifts.

REPORT OF THE EDITORS.

The report of the Editors of this Journal, Professors Oertel and Jewett, was presented by Professor Oertel, as follows:

Pursuant to a vote of the directors at the last annual meeting, the editors arranged to have the Journal published hereafter in four quarterly numbers. The first of these was sent to the members on December 1st, the second on March 1st. The third will be sent out on June 1st, and the fourth on September 1st. The second number contained the proceedings of the New York meeting. It is possible now to form an estimate of the cost of the printing of the current volume of the Journal. The first number of volume 30, including addressing and postage, cost 1271 marks and 30 pfennigs. The cost of the second number amounts

to 1006 marks and 50 pfennigs. Figuring on this basis, the Editors estimate that the whole volume will cost 4556 marks, thus coming well within the estimated sum of \$ 1200.

ELECTION OF MEMBERS.

The following persons, recommended by the Directors, were elected members of the Society:

HONORARY MEMBER.

Professor Hermann Oldenberg.

CORPORATE MEMBERS.

Mr. William E. M. Aitken,	Miss Sarah Fenton Hoyt,
Prof. Cornelius B. Bradley,	Mr. Charles Johnston.
Mr. Alexander H. Bullock.	Prof. Roland G. Kent,
Mr. Eugene Watson Burlingame,	Mr. C. O. Sylvester Mawson.
Mr. Francis A. Cunningham,	Mr. William Merrill,
Dr. Franklin Edgerton,	Mr. Bernard Revel.
Dr. William H. Worrell.	

OFFICERS FOR 1910-1911.

The committee appointed at New York to nominate officers for the ensuing year, consisting of Professor Harper, Dr. Haas, and Dr. Madsen, reported through Professor Harper and recommended the following, who were duly elected:

President—Professor Maurice Bloomfield, of Baltimore.

Vice-Presidents—Professor Paul Haupt, of Baltimore; Professor Henry Hyvernatt, of Washington; Professor Charles C. Torrey, of New Haven.

Corresponding Secretary—Professor A. V. Williams Jackson, of New York.

Recording Secretary—Professor George F. Moore, of Cambridge, Mass.

Secretary of the Section for Religions—Professor Morris Jastrow, Jr., of Philadelphia.

Treasurer—Professor Frederick Wells Williams, of New Haven.

Librarian—Professor Hanns Oertel, of New Haven.

Directors—The officers above named, and Professors Crawford H. Toy and Charles R. Lanman, of Cambridge; E. Washburn Hopkins, of New Haven; Richard Gottheil, of New York; Robert F. Harper and James R. Jewett, of Chicago; Dr. William Hayes Ward, of New York.

At four o'clock, at the conclusion of the business session, the Society adjourned to the large lecture-room in the same building, where the President, Dr. William Hayes Ward, delivered the annual address on "Oriental Sources of Greek Mythology."

At five o'clock Professor Eduard Meyer of the University of Berlin, Exchange Professor at Harvard University and an

Honorary Member of the Society, delivered in the same hall an illustrated lecture on "The Egyptians in the Time of the Pyramid-builders."

The evening was reserved for an informal gathering of the members for supper and general conversation.

SECOND SESSION.

The members re-assembled on Friday morning at half past nine o'clock for the second session. The following communications were presented:

Dr. F. R. Blake, of Johns Hopkins University: 'To be' and 'to have' in the Philippine languages.

Professor M. Bloomfield, of Johns Hopkins University: Announcement of a work on Repetitions in the Rig-Veda.

Mr. G. W. Brown, of Baltimore: *Prāṇa* and *apāna* in the Upanishads.—Remarks by Professor Bloomfield.

Professor C. E. Conant, of the University of Chattanooga: RGH and RLD in Philippine languages.—Remarks by Dr. Blake.

Rev. Dr. C. W. Currier, of Washington: Gonzales de Mendoza and his work on China.—Remarks by Professor Jastrow

Dr. A. Ember, of Johns Hopkins University: Semito-Egyptian sound-changes.—Remarks by Professor W. Max Müller.

Dr. M. Margolis, of Dropsie College, Philadelphia: Grammatical notes on transliterations in the Greek Old Testament.—Remarks by Professors W. Max Müller and Haupt.

Professor P. Haupt, of Johns Hopkins University: Babylonian words in the Talmud.

At twelve thirty the Society took a recess until half past two, and the members were invited to luncheon as guests of the University at the Johns Hopkins Club.

THIRD SESSION.

The third session was held in the large lecture-room in McCoy Hall, President Ward presiding. The following papers were read:

Professor L. C. Barret, of Dartmouth College: Myths about dragon-fights.—Remarks by Professor Bloomfield.

Dr. Lucia Grieve, of New York: The Mohurum in Western India.

Professor P. Haupt, of Johns Hopkins University: A Macabean oratorio.

Professor M. Jastrow, Jr., of the University of Pennsylvania: The Etana myth on the Babylonian-Assyrian seal-cylinders.—Remarks by Dr. Ward and Professor Bloomfield.

Professor G. A. Barton, of Bryn Mawr College: On the latest addition to the Babylonian Deluge literature; presented by Professor Torrey.—Remarks by Professors Haupt and Clay.

Dr. G. A. Reisner, of Harvard University: The Harvard excavations at Samaria in 1909; presented by Professor Lyon.

The reading of papers was concluded at four forty, and at five o'clock Professor Eduard Meyer delivered in the same hall a lecture on 'Augustus Caesar.' At half past seven the members met for dinner at the Johns Hopkins Club.

FOURTH SESSION.

On Saturday morning at half past nine the fourth and concluding session was held in the Donovan Room in McCoy Hall. President-elect Bloomfield presided in the absence of President Ward.

The directors reported that they had re-appointed Professors Oertel and Jewett as Editors of the Journal for the ensuing year.

They further announced that the next meeting would take place at Cambridge, Mass., on March 16, 17, and 18, 1911. (This date was afterwards changed by the Directors to April 20, 21, and 22 in Easter week.)

It was announced that the President had appointed as committee to nominate officers, Professors Hopkins, Christopher Johnston, and Barret; as committee to arrange the details of the next meeting, Professors Lyon, Lanman, and Jackson; as Auditors, Professors Torrey and Oertel.

On motion of President Francis Brown the following resolution was unanimously adopted:

The American Oriental Society desires to express its thanks to the Johns Hopkins University and to the Johns Hopkins and University Clubs for the courtesies they have extended to the Society during this meeting; and to the Committee of Arrangements for the provision they have made for its entertainment.

The presentation of papers was then resumed in the following order:

Professor D. G. Lyon, of Harvard University: Another word on the structure of the Hammurabi code.—Remarks by Professor Jastrow.

Rev. Mr. M. G. Kyle, of Philadelphia: The 'Field of Abraham' in the geographical list of Shishak I.

Dr. T. Michelson, of Ridgefield, Conn.: The dialect of the

Girnār redaction of Asoka's Fourteen Edicts.—Remarks by Professor Bloomfield.

Dr. Mary I. Hussey, of Cambridge, Mass.: Notes on some cuneiform tablets in the Semitic Museum of Harvard University.

Professor J. A. Montgomery, of Philadelphia: Some Judaeo-Aramaic mortuary inscriptions from the Hauran.—Remarks by Professor Jastrow, Dr. Yohannan, and Professor Bloomfield.

Professor H. Hyvernât, of the Catholic University of America: On some so-called prehistoric tablets lately discovered in Michigan.—Remarks by Professors Jastrow and Haupt.

Mr. G. V. Schick, of Baltimore: On the stems דים and דָּים.—Remarks of Professor Haupt.

Rev. Dr. F. A. Vanderburgh, of New York: A hymn to Mullil (*Cuneiform Texts*, vol. 15, plates 7, 8, and 9).—Remarks by Professor Jastrow.

Rev. Dr. A. Yohannan, of Columbia University: Inscriptions on some Persian tiles from Rhages. .

Dr. F. R. Blake, of Johns Hopkins University: Vocalic *n*, *m*, *r*, *l* in Semitic.—Remarks by Dr. Michelson.

Dr. A. Ember, of Johns Hopkins University: Some Hebrew etymologies.

Professor P. Haupt, of Johns Hopkins University: The priestly blessing.

Professor M. Jastrow, Jr., of the University of Pennsylvania: The Babylonian astrological series *Anu-Enlil*; presented in abstract.

Professor J. A. Montgomery, of Philadelphia: A novel form of early Syriac script.

The Society adjourned at half past twelve to meet in Cambridge, Mass., on March 16, 17, and 18, 1911. (This date was afterwards changed by the Directors to April 20, 21, and 22 in Easter week.)

The following communications were read by title:

Mr. W. E. M. Aitken, of Courtright, Canada: Collation of two unpublished copies of the Standard inscription of Ashur-naširpal.

Professor G. A. Barton, of Bryn Mawr College:

- (a) The significance of Babylonian label tablets;
- (b) The Babylonian calendar in the oldest temple archives;
- (c) The location of the Land of Uz.

Dr. I. M. Casanowicz, of the National Museum at Washington: Note on some usages of לָקַן.

Professor M. W. Easton, of the University of Pennsylvania: The physics and psychology of the Vaiśeṣika system.

Dr. A. Ember, of Johns Hopkins University: On the transliteration of Egyptian.

Professor E. W. Fay, of the University of Texas: Two Indo-Iranian notes.

Dr. L. H. Gray, of Newark, N. J.: The Parsi-Persian *Burj Nāmāh*, or Book of Omens from the Moon.

Professor F. Hirth, of Columbia University: On methods of studying Chinese.

Professor E. W. Hopkins, of Yale University: Mythological aspects of woods and mountains in the Sanskrit Epic.

Professor A. V. W. Jackson, of Columbia University: On the precise location of the Pass of the Caspian Gates.

Professor Hermann Jacobi, of the University of Bonn: When were the philosophical Sūtras of the Brahmans composed?

Mr. Charles Johnston, of New York: On a Buddhist catechism.

Professor C. R. Lanman, of Harvard University: Buddhaghosa and the Way of Purity.

Professor D. G. Lyon, of Harvard University: Some recent accessions to the Harvard Semitic Museum.

Professor W. Max Müller, of Philadelphia:

(a) The swords of the ancient Orient.

(b) An American scarab.

Professor J. D. Prince, of Columbia University: A hymn to the goddess Kir-gi-lu (*Cuneiform Texts*. vol. 15, plate 23).

Rev. Dr. W. Rosenau, of Johns Hopkins University:

(a) A word about Abraham Geiger;

(b) Some educational theories held by the Rabbis prior to the last century.

Professor C. C. Torrey, of Yale University:

(a) A bilingual inscription from Baal-Peor;

(b) The American School in Jerusalem.

The Mystery of Fu-lin.—By FRIEDRICH HIRTH, Professor
in Columbia University, New York City.

THE several accounts we possess in Chinese literature of that mysterious country in the extreme west called Fu-lin declare it to be identical with the country known in ancient times as Ta-ts'in. The texts of the T'ang dynasty speak of "Fu-lin, that is the ancient Ta-ts'in." or of "Tats'in, also called Fu-lin," and it appears that the two names were interchangeable. From the Chinese point of view the question would, therefore, be simple enough. If Ta-ts'in is Syria, Fu-lin must be Syria. I am nevertheless disinclined to be guided by this kind of logic and fully admit the difficulty of the Fu-lin problem.

My present view, which in its main features has undergone little change from the one expressed twenty-five years ago in my first study of the subject,¹ is briefly this: Ta-ts'in is the Roman empire with all its grandeur emanating from Rome, its capital; but the detail placed on record in the contemporaneous Chinese texts is confined to its Asiatic provinces, for which reason not Rome, but Antioch is described as the capital city. Its relations to China were of a commercial kind. Fu-lin is the Eastern empire of Byzantium, but as in the case of Ta-ts'in, the Chinese accounts are confined to certain Asiatic portions of it, and its relations to China were chiefly ecclesiastical. This at least is the impression I have received from the study of the Fu-lin chapters in the Chinese standard histories. I admit that Chinese literature contains a few passages, to which I hope to revert on some future occasion, which seem to involve that, besides the countries described in the standard accounts, a Greater Ta-ts'in and a Greater Fu-lin were not unknown in China.

¹ *China and the Roman Orient: Researches into their Ancient and Mediæval Relations as represented in old Chinese records.* Shanghai, 1885. I shall in the course of these notes refer to this book by the letters *R. O.*

This view has been recently abandoned by my esteemed friend Professor Éd. Chavannes, who thinks that Fu-lin is after all Constantinople and not Syria.¹ His arguments are briefly these.

1. The name Fu-lin represents the Greek accusative πόλιν in εἰς τὴν πόλιν, Istan-polin, according to Mas'udi the origin of the name Istambul.

2. The name Fu-lin appears in Chinese literature previous to the arrival of the Nestorians in China.

3. It may have been brought to China during the Sui period by the Western Turks, who had been visited by Byzantine ambassadors in 568 and 576 A. D.

4. The king of Fu-lin who sent ambassadors to China in 643 was called *Po-to-li* (波多力). By substituting 悉 for 多, the name would appear as *Po-si-li*, which may stand for βασιλεύς.

5. The Arab general *Mo-i*, who was sent to effect the siege of Fu-lin, may be identical with Muawia's son "Yézyd ben Muawia," one of three emirs who attacked Constantinople.

6. The king of Fu-lin who sent an embassy to China in 1081 *Miê-li-i-lîng-kai-sa* may have been identical with the pretender Nicephorus Melissenus, the character 伊 i in that name being a mistake for 俟 ssî.

Professor Chavannes justifies the changes he suggests in connection with such names as *Po-to-li* and *Miê-li-i* by the frequency of errors in the tradition of Chinese texts. I quite admit this argument as applying to certain works, such as the *Ts'ö-fu-yüan-kui*, from which his "Notes additionelles" have been mainly derived. This work bristles with mistakes; but I would be much less inclined to assume such errors in the texts of the standard histories, the tradition of which, as regards names, compares not unfavourably with that of our me-

¹ In his paper entitled "Notes additionelles sur les Tou-kiue (Turcs) occidentaux" in *T'oung-pao*, 1904, p. 37, note 3, in which he says: "J'ai identifié ce pays [Fou-lin] avec la Syrie, parce que j'acceptais la théorie soutenue avec beaucoup de talent par HIRTH (*China and the Roman Orient*) qui voit dans le terme *Fou-lin* (anciennement *but-lim*) le nom de Beth-léhem, et qui considère *Po-to-li*, roi du Fou-lin, comme le *bathrik*, c'est-à-dire le patriarche des Nestoriens. Un nouvel examen de la question me conduit cependant à reprendre l'ancienne identification de *Fou-lin* avec Byzance."

diæval Greek and Latin classics.¹ Conjectures of this kind may occasionally become necessary, but they ought in all cases to be supported by strong circumstantial evidence and ought also to admit of some plausible paleographic explanation.

I have called this paper "The Mystery of Fu-lin," and I wish to indicate thereby that I do not by any means pretend to have removed all doubt from what may remain a mystery for ever. I cannot, however, refrain from placing on record the arguments which have induced me to maintain my original view. I welcome Professor Chavannes' criticism as the best means throwing light on the problem, and I shall be happy to hear of his further researches in the direction indicated. There still remain quite a number of important points to be settled in connection with both Ta-ts'in and Fu-lin, and who knows whether some unexpected discovery will not some day either shake, or confirm, our present views, if not furnish clues which nobody has thought of.

1. The old sound of the name Fu-lin (拂 菴).

The first character 拂, now pronounced *fu* in the Mandarin, and *fat* in the Canton dialect, has a final *t*, according to all the mediæval authorities quoted by K'ang-hi (Rad. 63, 5). In the *Tsi-yün*, a work which appeared as late as the Sung Dynasty, its sound is described as 薄蜜切, i. e., *p(ok-m)at*, or *pat*.

The second character 菴, now pronounced *lin* in the Mandarin, and *lam* in the Canton dialect, was according to the *Tsi-yün* pronounced 力錦切, i. e., *l(ik-k)am*, or *lam*, and K'ang-hi quotes the name *Fu-lin* (*Fat-lam* or *Pat-lam*) as an example of that pronunciation (Rad. 140, 8).

As a further example of the old sound ending in *m*, and not in *n*, I may quote the name of one of the priests which appears in estrangelo characters as *Ephraem* (read Abraham by Kircher) in the Syriac part of the Nestorian inscription with the Chinese transcription 拂 林, = *fu-lin*, *fat-lam* or *pat-lam*. I need not say that 林 and 菴 are identical in sound. Certainly the final of this character was *m*, and not *n*. In

¹ Cf. my remarks on the "Textkritik" of Chinese authors, *R. O.*, p. 8 seq.

order to express the syllable *lin* in *πόλις*, a Chinese transcriber of the sixth century would have selected some such character as 鄰, *lin*, the old final of which is *n*, rather than a sound ending in *m*. In the *T'ang-shu-shü-yin*, chap. 24, p. 3, ad vocem *Fu-lin*, the sound of the character 麻 is described as 力稔, i. e. *l* (ik-n) *am* = *lam*.

As may be seen from *R. O.*, p. 287, note 2, I do not doubt the correctness of the etymology of the name *Istambul* = *Istanpolin* (εἰς τὴν πόλιν) as suggested by Mas'udi;¹ but we have to take into consideration that, as Professor Chavannes says himself, it applies to about the year 344 H., i. e., the tenth century A. D., whereas the name *Fu-lin* was first used in the sixth, or seventh, century. But, even granting the Byzantine Romans of that early period having called their capital "*Istanpolin*," this need not force us to identify the name with Chinese "*Fu-lin*."

2. First occurrence of the name *Fu-lin*.

I quite agree with Professor Chavannes about the *Sui-shu* being the oldest record in which the name *Fu-lin* is mentioned. Indeed I called attention to it on p. 17 and p. 288, note, of my book. The biographical portion, including the records regarding foreign countries, of that historian was completed in 636 A. D., as we are told in the Catalogue of the Imperial Library,² that is just a year after the arrival at Ch'ang-an of the first Nestorian mission under O-lo-pön (probably a transcription for *Rabân* or *Rabban*,—id est, *monasterii propositus*, Assemani, *Bibl. Or.*, III Pt. ii, pp. 911 and 913—also very common as a name). It seems to me quite possible that the name *Fu-lin* was just then substituted in the final revision of the *Sui-shu* text for that of *Ta-ts'in*, which may have been the original reading. But even if this had not been the case, why could not the Chinese have received notices of the country under its new name *Fu-lin* from sources not connected with the arrival of its natives, just as well as *Ta-ts'in* was known to them at the time of the general Pan Chau's campaign long

¹ For a careful compilation of material regarding the origin and history of this name see E. Oberhummer in Pauly-Wissowa's "Real-Encyclopädie," s. v. "Constantinopolis."

² *Tsung-mu*, chap. 45, p. 53.

before the first Ta-ts'in mission reached China in 166 A. D.? We know that the emperor Yang-ti tried in vain to have intercourse with Fu-lin. Could not he, or his representative Pei K'ü, the author of the *Sui-si-yü-t'u* (隋西域圖), have heard the name as being identical with that of Ta-ts'in through the Nestorians in other western countries which had then come into contact with China, such as Persia, which is described with considerable detail in the *Sui-shu*, with its city of Madain, then the see of Nestorian patriarchs? Certainly the appearance of the name Fu-lin in Chinese literature previous to that of the Nestorians in China does not argue against the identity of the country with Syria. Professor Chavannes refers to the three trade routes quoted from Pei K'ü's work in the *Sui-shu* (chap. 67, p. 12), the northern one of which leads by way of I-wu (Hami) past P'u-lei-hai (Lake Barkul), the T'îé-lö (Tölös) tribes, the court of the Great Khan of the Turks, and, *crossing the rivers that flow north, to the country of Fu-lin and to the western sea.*" The route thus described is in my opinion not the later road to Constantinople, which skirted the Aral, the Caspian and the Pontus, since the several rivers to be passed in it *flow south*; "*the rivers that flow north*" must be the Jaxartes and the Oxus, and I take it for granted that this northern route would have taken travellers to Antioch as the capital of Fu-lin. Neither John of Montecorvino nor Rubruck had to cross the "rivers that flow north," nor does Pegolotti recommend such a route except to those who may have merchandize to dispose of at Urgendj (see Yule. *Cathay and the Way Thither*, p. 288).

3. Who were the informants through whom the name Fu-lin became first known in China?

We know from the *Kiu-t'ang-shu* (R. O., pp. 55 and 105. K. 33) that the emperor Yang-ti wished to open intercourse with Fu-lin, but did not succeed. Professor Chavannes, who thinks of Constantinople, maintains that the name Fu-lin became known in China through the Western Turks, and he refers to the relations of those Turks with the Byzantine Court. "A Chinese envoy at the court of the Turkish Great Khan," he says, "may have met some of these Greeks, or heard them spoken about; and thus the name of Constantinople came to

China in its form *Polin*, given to it by the Greeks themselves according to Ma's'udi." I wish to offer a somewhat different explanation. In the introduction to the chapter on the western countries the *Sui-shu* (chap. 83, p. 1) confirms the emperor Yang-ti's desire to have communication with as many countries as possible; the emperor, therefore, sent expeditions under Wei Tsié (韋節), author of a lost work, called *Si-fan-ki* (西蕃記) and quoted in the *T'ung-tiën* in connection with the Ephthalites, and Tu Hing-man (杜行滿). The latter visited the regions of Western Turkestan. Other officials were sent to Japan, Siam, etc.¹ After that he appointed Pei K'ü to a special post in north-west Kan-su with a view of inducing foreign countries to send envoys to China. From the account of Possi (波斯, i. e. Persia, chap. 83, p. 16) we learn that Yang-ti had deputed an envoy by the name of Li Yü (李昱) for the special purpose of persuading the Persians to send a mission to China, and Persian ambassadors actually came to China together with Li Yü, offering tribute to the court. This Persian embassy, according to the *Ts'ö-fu-yüan-kui* (chap. 970, p. 3), arrived with the envoys of quite a number of other states in 616 A. D., probably a few years earlier, since the wording of this record, though entered under that special year, seems to involve the Ta-yé period (605 to 617 A. D.) generally as the date of arrival.

When Yang-ti's envoy Li Yü arrived in Persia, the Persian throne was occupied by Khosru II, the bitterest enemy of all the Christians, including his political opponent, the emperor Heraclius. Syria was again held by the Romans, after it had been devastated by the Persians a generation ago. Antioch, already reduced to great straits by the earthquake of 525 A. D., had been sacked and destroyed by Khosru I in 540 A. D. If Antioch was the capital of old Ta-ts'in, or as I maintain, of its equivalent, Fu-lin, the fall of this city would mark an event in the interpretation of the name inasmuch as a second Antioch had been built on Persian ground. Much of the mystery surrounding the Ta-ts'in and Fu-lin question may be explained thereby. I quote Rawlinson's *The Seventh Great Oriental Monarchy* (London, 1876, p. 395):

"The Persian prince [Khosru I] after the fall of Antioch

¹ See *Ts'ö-fu-yüan-kui*, chap. 662, p. 22 seq.

passed the winter in building and beautifying a Persian Antioch in the neighbourhood of Ctesiphon, assigning it as a residence to his Syrian captives, for whose use he constructed public baths and a spacious hippodrome, where the entertainments familiar to them from their youth were reproduced by Syrian artists. The new city was exempt from the jurisdiction of Persian satraps, and was made directly dependent upon the king, who supplied it with corn gratuitously, and allowed it to become an inviolable asylum for all such Greek slaves as should take shelter in it, and be acknowledged as their kinsmen by any of the inhabitants. A model of Greek civilization was thus brought into close contact with the Persian court." Rawlinson adds in a footnote: "Here the Oriental accounts are in entire accord with the Greek. Mirkhond and Tabari relate at length the construction of this new Antioch in the vicinity of Al Modain, adding that the name given to it was Rumia (Rome), and that it was an exact copy of the town upon the Orontes."

The captivity of the Antiochian christians is referred to by Barhebraeus¹ and in Mar Amr's biographies of the Nestorian patriarchs.² Tabari describes the new city in two passages³ with some detail. The great Persian king had endeavoured to build this new Antioch just like the old city in Syria, and when the captives entered its gates, everyone of them found a home so similar to the one he had left in Syria that he might imagine to be there. Khosru I did not, at least at first, interfere with their Christian idiosyncracies, but the history of the Nestorian patriarchs in the sequel abounds with examples of that tenacity with which the heroes among them would rather

¹ J. B. Abbeloos and Tho. J. Lamy, *Gregorii Barhebraei Chronicon Ecclesiasticum*, Paris 1877, II 86: "Hic (Chosroës Anuschervan) post annos octo Antiochiam invasit incenditque, ejus vero incolas captivos abduxit atque eis Mahuzam condidit, quam Antiochiam appellavit, eosque illic habitare jussit." Mahuza is explained by Assemani (*Bibl. Or.* III Pt. ii, p. 761) to be a city in Babylonia "apud Ctesiphontem ex altera fluminis parte, ad provinciam patriarchalem pertinens, eademque Bagdadi suburbium, et Carcha, Corch seu Charch, appellatur." Professor Jastrow tells me that *mahuza* is Babylonian for *city*.

² Henricus Gismondi S.J., *Maris Amri et Slibae De Patriarchis Nestorianorum Commentaria*, Part II, containing the Latin version, Rome 1897, p. 24.

³ Th. Nöldeke, *Geschichte der Perser und Araber zur Zeit der Sasaniden*, Leiden 1879, pp. 165 and 239.

undergo martyrdom of any kind than cease to be faithful to their traditions. Many of them are recorded to have suffered death and torture under the threats of Persian kings and Arabic caliphs. It is to this virtue of the Syrian captives that Tu Huan, the author of the *Hing-king-ki* (杜環行經記), who had been made a prisoner and retained in Persia for ten years after the battle of Tharaz in 751 A. D., refers when he says of the people of Fu-lin, which country he places in the west of Sham (苦, = Damask): "*If they live as captives in foreign states they will rather accept death than change their national customs.*" I have adopted Mr. Playfair's improved translation of this passage, though I do not with him apply it to the Israelites in exile, but to the Christians in their second Antioch near Madain.¹ A prominent case of Christian martyrdom has been recorded in Mar Amr's work (*op. cit.*, p. 37) as having occurred in the third year of Abul-Abbas (752 A. D.; "per id tempus martyrium fecit Israel medicus, cui Deus requiem concedat"). Assemani (II, p. 432) refers to it in connection with the imprisonment of the patriarch Jacob (754—773 A. D.) by the caliph Abu-Jafar, under whose reign, just at the time when Tu Huan himself lived as a captive in Persia, the Syrian Christians suffered more than ever under the persecutions of Mohammedan potentates. These were the outposts of the people of Fu-lin, who may have furnished the Chinese envoy to Khosru II, Li Yü, with the accounts of their country in Syria, and if the envoy's visit to the Persian court, placed in the Ta-yé period by the Chinese historians, took place in the earlier part of it, when Syria was still protected by the Roman army, this would be a sufficient reason why Yang-ti's wish to communicate with the mother country Fu-lin could not be fulfilled. Such certainly was the state of things previous to the year 611 A. D., when Apameia and Antioch were sacked by the Persians under Khosru II. The Emperor's commissioner in Central Asia, Pei K'ü, who shared his master's ambition to see ambassadors of all the great countries of Asia at the steps of the dragon throne, succeeded in a wonderful manner; for he communicated with all, "only T'ién-chu (India) and Fu-lin (Syria) he did not reach to his regret."²

¹ Cf. Playfair, "The Mystery of Ta-ts'in" in *Journal of the China Br., R. A. S.*, Vol. XX, 1885, p. 78, referring to *R. O.*, pp. 83 and 116, Q 45.

² 獨天竺拂菻不至爲恨, *T'ang-shu*, chap. 221A, p. 25B.

4. The king of Fu-lin Po-to-li.

I have always been of opinion that Ta-ts'in and Fu-lin have to be looked upon as the representatives of the Christian world. Even in the early accounts of Ta-ts'in we may notice an ecclesiastical colouring. "Their kings are not permanent rulers, but they appoint men of merit. When a severe calamity visits the country, or untimely rain-storms, the king is deposed and replaced by another. The one relieved from his duties submits to his degradation without a murmur."¹ This is clearly neither a Roman Emperor, nor a praetor or proconsul, but a patriarch of the Christian Church, the patriarch of Antioch as the head of all the Christians in Asia. With the settling of so many Syrian Christians in Persia after the fall of Antioch in 540 A. D., the Nestorian patriarch in Persia could perhaps lay claim to that dignity.² His residence in exile was merely a makeshift; to his own flock and to the Chinese behind them he was the patriarch of all the Christians, whatever the heterodox clergy in the west may have thought of it. It was the Nestorian patriarch who sent the first Christian missionaries to China, and whether he did so under orders from a still higher patriarch in Antioch, or on his own authority, it seems not easy to decide. We have a direct allusion to this crux by a Byzantine author, the archimandrite Nilos Doxopatres, a notary in the service of the patriarch of Constantinople, who in 1143 A. D. wrote, for king Rogers II of Sicily, a short treatise on the patriarchal thrones.³ Doxopatres may have been a biassed judge owing to his connection with the orthodox church, for he seems to ignore the schism when he says that "the patriarch of Antioch was in charge of all Asia and Anatolia and even India, whither he had sent a *katholikos* ordained by himself, styled the one of Romogryis, and also of Persia and Babylon, called Bagdad in his time.

¹ *Hôu-han-shu*, R. O., pp. 41 and 100, E 19 and 20.

² According to Assemani, *Bibl. Or.*, III Pt ii, p. 617, the Nestorian Archbishop at Seleucia and the Metropolitan of Persia had to proceed to Antioch for their ordination by the Patriarch previous to 498 A. D., after which time the "Catholicus" of the Nestorians claimed the title of Patriarch, in order to be relieved of the perilous journey to Antioch.

³ Krumbacher, *Gesch. d. byzantin. Litteratur*, 2nd ed., München 1897, p. 415 seq.

and that he had under him altogether thirteen metropolitans.”¹ We know that the early Christians in India were Nestorians. The discovery of crosses resembling in shape the one appearing above the Nestorian tablet of Si-an-fu and, moreover, surrounded by Pehlevi inscriptions² points to the Nestorians in Persia as their originators.

Doxopatres' statement seems to show that the patriarch of Antioch (i. e. of Syria or Ta-ts'in) was at least the *nominal* head of the Christians of Asia and that the several metropolitans, including those of the Nestorians in Persia and in India, were nominally appointed under his authority. If the patriarch of the Nestorians appointed his own men to the Persian sees and to those of India and China, as we have every reason to assume, he may either have had this power delegated on him, or he may have acted on a self-assumed authority, looking upon himself as the patriarch of Antioch living in exile. According to my personal view it is the patriarch at the head of the Christians in Asia who is meant by the term “king of Fu-lin,” or „of Ta-ts'in,” in the later texts. To support this theory I wish to refer to an account of Ta-ts'in dating within scarcely a generation after the time when Nilos Doxopatres wrote that treatise according to which the “patriarch of Antioch” appoints the heads of all the other churches in Asia, including the one of the Christians in India. This it appears to me we may infer from Chau Ju-kua's texts regarding Ta-ts'in and T'ién-chu (usually translated by India, but here covering the Christian settlements in that country). Chau Ju-kua says of his T'ién-chu: “The country is subordinate to the country of Ta-ts'in and its chiefs are selected *by* Ta-ts'in.”³ I have endeavoured to explain this, at first sight startling, assertion by the relations existing, previous to the arrival of the Portuguese, between the Indian church of St. Thomas and the Nestorian patriarch as the ecclesiastical “King of Ta-

¹ Πάλιν ὁ Ἀντιοχείας κατείχεν ἅπαντα τὴν Ἀσίαν καὶ Ἀνατολὴν αὐτὴν τε τὴν Ἰνδίαν, ὅπου καὶ ἕως τοῦ νῦν Καθολικὸν χειροτονῶν στέλλας τὸν καλούμενον Ῥωμυγύρεως καὶ αὐτὴν τὴν Περσίαν, ἔτι καὶ αὐτὴν τὴν Βαβυλῶνα τὴν νῦν καλουμένην Βαγδὰ καὶ κεῖ γὰρ ἔστελλεν ὁ Ἀντιοχείας ἔχει οὖν μητροπολεῖς σήμερον ἑκατρεῖς. *Varia Sacra Stephani le Moyne*, Leiden 1685, II, p. 211 seq. Cf. Renaudot, *Ancient Accounts of India and China*, London 1733, p. 119.

² J. Richter, *Indische Missionsgeschichte*, Gütersloh 1906, p. 36.

³ 天竺國隸大秦國所立國主悉由大秦選擇。

ts'in."¹ On entering deeper into the subject I am encouraged in maintaining this view,² though there seems to be some doubt as to who the real chief of the church has been, whether the patriarch of Antioch or the one of the Nestorians in Persia. The Nestorian primate, to whom part of his jurisdiction may have been ceded by the Patriarch of Antioch (*Privilegium a Patriarcha Antiocheno concessum Primati Seleuciensi ut Episcopus ordinare possit*. Assemani, III Pt i, p. 145), seems to have been more settled in his authority in later centuries, when the extension of his dominion had grown too much for his western colleague, than in ancient times. I do not venture to say that Nestorian patriarchs called themselves "Patriarchs of Antioch." There is, however, a strange synchronism between the statement, said to be the result of an error by Assemani (*Bibl. Orient.*, III Pt. i, p. 289: "Golius apud Hottingerum in *Bibl. Or.*, p. 62") to the effect that Elias III, catholic of the Nestorians 1176—1190, was

¹ See "Chao Ju-kua's Ethnography" in *Journ. of the R. Asiat. Soc.*, July 1906, pp. 496—499.

² Ample material will be found in W. Germann, *Die Kirche der Thomaschristen*, Gütersloh, 1877, and Richter's *Indische Missionsgeschichte*. The following sentences are selected from Capt. Charles Swanston's paper "A memoir of the Primitive Church of Malayala. or of the Syrian christians of the Apostle Thomas from its first rise to the present time" in *Journ. of the R. Asiat. Soc.*, Vol. i, pp. 172—192, and Vol. ii, pp. 51—62 and 243—247.

"In 825, a merchant named Job conducted into Malabar, from Babylon, two Syrian ecclesiastics, Mar Saul and Mar Ambrose, sent by the Nestorian patriarch to rule over the church of St. Thomas." "These prelates governed the church in Trovancór for many years." "They were followed by a succession of teachers from Syria, who ruled over the church" (i, p. 178). "The authority of the Syrian bishops extends to all temporal and spiritual matters" (p. 180—181). "The Nestorian patriarch of Babylon,—a vague appellation, which has been successfully applied to the royal seat of Seleucia, of Ctesiphon, and of Bagdad" (p. 183). "Whatever credit may be thought due to the current tradition of these Christians, that the Apostle Thomas planted the seeds of the Gospel among them, so much may be considered established beyond contradiction, that they existed in Trovancór as a flourishing people, connected with the Syrian church, from the first centuries of the Christian era" (ii, p. 234). "Their liturgy is that which was formerly read in the churches of the *Patriarch of Antioch*, and their language is the *Syriac*" (p. 237). "They hold in the highest respect their *Patriarch of Antioch* or *Mosul*, and make mention of him in their prayers" (p. 239).

called "Patriarch of Antioch," and Chau Ju-kua's source, the *Ling-wai-tai-ta*, published in 1178, which says that the king of Ta-ts'in ("Patriarch of Antioch") appoints the lord of T'ien-chu (here ruler over the Christians in India). Assemani (l. c.) admits that the Melchite, Maronite and Jacobite Syrians gave that title to their patriarchs, but by no means the Nestorians. For Assemani's views on the patriarchal title among Nestorians see also *Bibl. Or.*, III, p. 57 seq.

Chau Ju-kua's account of Ta-ts'in¹ is mixed up with a good deal of ancient lore, of which it has to be freed before being taken into consideration. Thanks to the discovery of Professor Tsuboi of Tokio, who drew attention to the *Ling-wai-tai-ta* by Chóu K'ü-fei,² we are able to trace about one-third of the substance of Chau Ju-kua's work to this earlier writer, who had collected notices from personal enquiries, but did not publish them for a number of years, until he became tired of so many questions addressed to him about them by his friends. Thus the preface of his work, which may have been partly written some time before its publication, happens to be dated 1178 A. D., i. e. thirty-five years after the time in which Doxopatres wrote his treatise. It contains the account of Ta-ts'in partly copied by Chau Ju-kua, and in its simplicity makes the impression of a contemporaneous record.³

Chóu K'ü-fei says (chap. 3, p. 1): "The king is styled Ma-lo-fu" (王號麻囉弗, in Cantonese *ma-lo-fat*, or giving the last character its probable old sound: *ma-lo-pat*). Since *fu* 弗 occurs in a Sanskrit transcription for *bha* (see Julien, *Méthode*, etc., p. 104, No. 309), we may read: *ma-lo-pa*. This I look upon as the title by which "the king," or in this case the patriarch, was known to Chóu K'ü-fei's informants. It seems to correspond to Syriac *Mar-Aba*, which was indeed one of the titles by which the patriarch could be addressed. *Mar* is a title of honour given to learned devotees among the Nestorians, somewhat like our "Venerable,"⁴ *Aba* means "father." *Mar-Aba* may thus be translated by "Venerable Father." Its

¹ *R. O.*, pp. 92—96 and 120—122.

² "Cheu Ch'ü-fei's Aufzeichnungen über die fremden Länder", etc., in *Actes, XIIe Congrès Int. des Orient.*, Rome 1899, II, pp. 69—125.

³ Tsuboi, *op. cit.*, p. 107—110.

⁴ "*Mar*, Syriace, Dominus meus, ut post Assemanum observant docti Hagiographi", Ducange, *Glossarium*, etc., ed. L. Favre, s. v. *Mar*.

Greek and Latin equivalent was *Patricius* (πατρίκιος, *patrik*).¹ "Patricius," as a title, may be applied to a number of high positions in the ancient west. Petros Patrikios, the emperor Justinian's ambassador to the Eastern Goths in 534 A. D. and to king Kosru of Persia in 550 and 560, held this dignity.² Roman prefects and even church dignitaries could hold this title after Constantinus the Great, its supposed creator.³ But I cannot quote any particular instance in which it applies to an oriental patriarch of either Antioch or Madain.⁴ The root *patrik* would be an excellent equivalent for Chinese *po-to-lik*. But the Aramean form for the word "patriarch" itself, *batrirk*, would be fully as good from a linguistic point of view and would suit even much better on account of its sense. I do not, therefore, hesitate to adhere to my original identification of the old sound *po-to-lik* with *batrirk* against Chavannes' βασιλείς.

Two years before Chóu K'ü-fei published his accounts of Ta-ts'in and T'ien-chu, in 1176 A. D. the Nestorian church of Bagdad was under its patriarch Elias III, elected and ordained at Madain, where he was endowed with a greenish cloak, "pallio amictus *pistacini* coloris" (Mar Amr, ed. Gismondi, II, p. 64). The sacred gown here translated by pallium is by later authors described as a kind of "pluviale," or rain cloak. The mistaken description of this gown may have caused the Chinese author to speak of a "green" (青) umbrella, by which the "king of Ta-ts'in" is protected when appearing in public. Elias III distinguished himself by his architectural works. He re-built the patriarchal palace together with the

¹ "Quem enim Graeci Latinique *Patricium* vocant, is dicitur Syriace *Aba*, et praefixo *Mar*, seu Domini titulo, *Mar-Aba*," Assemani, *op. cit.* III, Part ii, p. 92 (quoting Bar Hebraeus).

² Krumbacher, *op. cit.*, p. 237.

³ Du Cange, s. v. *Patricius*.

⁴ As a title, though it seems certain that Cosmas Indicopleustes (Migne, p. 125) speaks of a "Catholic of Persia," i. e. the head of the Nestorian church, under the name of Πατρίκιος; at a time when, according to other sources (Amr, p. 23), Mar Aba occupied the patriarchal see (536—552 A. D.). This may be the basis of Assemani's identification of the titles *Patricius* and *Mar Aba* (cf. also J. W. McCrindle's note on the passage referred to in *The Christian Topography of Cosmas*, London 1897, p. 24).

Church ("cellam in aedibus Romanorum reaedificare coepit unâ cum ecclesia,"—says Mar Amr, cf. Barhebraeus' *Chronicon*, Abbeloos and Lamy, Vol. iii, p. 370), while according to the Chinese account of 1178 the king of Ta-ts'in had a subway built from his palace to the Hall of Worship (*R. O.*, p. 93). Although the Nestorian patriarchs were even at this time crowned at Madain, their place of residence had since the eighth century been at Bagdad, for which reason Ch'ou K'ü-fei, and with him Chau Ju-kua, speak of Ta-ts'in as "the general meeting ground for the nations of the Western heaven and the place where the foreign merchants of Ta-shih [Arabs and Persians] assemble." *R. O.*, R 1.

The king of Fu-lin, who in 643 A. D., more than five hundred years before the time of Elias III, sent an embassy to China, did so at a time when Nestorians were in full grace with the Chinese court. The emperor T'ai-tsung favoured them with a message under his imperial seal and graciously granted presents of silk.¹ The king's name, as entered in the two versions of the *T'ang-shu*, was *Po-to-li* (波多力, in Cantonese *Po-to-lik*). What I consider to be the Syriac transcription of this title could, of course, apply to the orthodox patriarch Mar Joannes, the pontifex of Antioch, who died after eighteen years' government in 649 A. D.,² and who is distinctly described as *batrirk* ܒܬܪܝܩ. In his case—at that early time—the title *batrirk* seems certainly unquestionable, whereas his Nestorian contemporary Jesujab II is styled *kattulik* ܕܬܘܠܝܩ.³ On the other hand I observe that the Nestorian chiefs are styled *batrirk* in Mar Amr's biographies throughout, and that the Nestorians who erected the tablet of Si-an-fu say that this was done at the time when "the father of fathers" Mar Hanānjesus was the catholic *patriarch*.⁴ This shows that the title, whether accorded to their primate by orthodox writers or not, was claimed for him by his own

¹ *R. O.*, K 34 and L 41.

² Barhebraeus, *op. cit.*, I, p. 279.

³ Barhebr., II. p. 114. Regarding the titles by which the early Nestorian chiefs have been referred to see Christ. Harder, *Historiae Primitivae ecclesiae Nestorianorum ab Amro filio Matthaei Arabice scriptae versionis specimen*. Neumünster, 1890, p. 4.

⁴ *batrirkis* in estrangelo characters, see Havret, *La stèle chrétienne*, etc., I, p. LXXIX.

subordinates, and thus circumstances may also favour the identification of the person called *Po-to-lik* with the patriarch Jesujab II, who was at the head of the Nestorian church from 627 to 646,—a man of great political importance, who had acted as ambassador of the Persian court to the emperor Heraclius. To whichever of the two dignitaries we may give the preference, we have to consider the ecclesiastical character of certain subsequent missions to China. One of these was sent in 719 A. D., when “their lord” (其主) deputed a chief of T’u-huo-lo (Tokharestan) on a mission to the Chinese court.¹ The Nestorian patriarch was probably in a position to do so through one of his subordinates, some bishop of Balkh, a city of T’u-huo-lo or Tokharestan. For only sixty-two years later the Nestorian chorepiscopus of Kumdan, Mar Idbuzid, who had his name engraved on the Nestorian tablet with those of his fellow priests in estrangelo characters, calls himself “son of Milis, priest of Balkh.” This Milis was evidently, like his son, a Nestorian priest, and since Idbuzid probably did not attain the dignity of chief of the church of Kumdan as a young man, which was the exception among Nestorian prelates, it would appear that the Nestorians actually had a church with priests in the city of Balkh about the time when the Fu-lin embassy of 719 A. D. came to China.² I am not aware that the Byzantine Romans had any relations with Tokharestan in 719 A. D., when they had a narrow escape of seeing their capital sacked by the moslems. A few months later Fu-lin sent “priests of great virtue” with tribute to China, a further reason for regarding these relations as more of an ecclesiastical than a political character. The *Ts’ö-fu-yüan-kui* places a mission of priests in the year 742 A. D., while in 744, according to the Nestorian Inscription, “there was (it is not said when he had arrived) the Ta-ts’in priest *Ki-ho*, who had an audience with the Emperor.”

¹ R. O., K 38.

² Cf. Assemani, III Part ii, pp. 482, 550 and 727 seq: “In notitia Metropoleon apud Amrum *Halac* vigesimum locum occupat, quae eadem est ac Balcha.”

5. Political facts stated in Chinese records excluding identification with Constantinople.

The *Kiu-t'ang-shu* says: "Since the Ta-shī [Arabs] had conquered these countries they sent their commander-in-chief Mo-i [Muawia] to besiege the capital city [of Fu-lin]; by means of an agreement they obtained friendly relations, and asked to be allowed to pay every year tribute of gold and silk; *in the sequel they became subject to the Ta-shī* [Arabs]." ¹

Professor Chavannes agrees with me in explaining the name Mo-i (摩拽) as a mutilation of the sound Muawia. He does not, however, refer it to the great Muawia, who, before he became caliph, had been appointed Governor of Syria (Fu-lin) under Othman, but to his son Yezid, in order to show that the passage refers to one of the sieges of Constantinople. In doing so he seems to overlook the fact that Fu-lin was not only *conquered*, but "*in the sequel became subject to the Arabs*;" and that this means much more than a mere temporary conquest may be shown from a passage of the *Kiu-t'ang-shu* (chap. 198 p. 29), which states that the Ta-shī, i. e. the Arabs of the caliph empire, "in the beginning of the Lung-so period (661—664 A. D.), on having defeated Po-ssī (Persia) and Fu-lin, began to be in the possession of rice and bread stuff." ² Fu-lin can in this case only refer to Syria. Constantinople was never subject to the Arabs, nor did the imperial dominions outside of Asia supply them with grain. ³

¹ 遂臣屬大食. *R. O.*, K 35; cf. L 43.

² 初擊破波斯又破拂菻始有米麵之屬.

³ Something similar is remarked in the *Sung-shī*, ch. 90, p. 18, in the account of a mission from the Ta-shī having arrived at the Imperial court in 995 A. D.; but the country is there referred to under its old name Ta-ts'in. The emperor asked the Ta-shī (Arab, or Persian, of the Caliph empire, then divided into numerous branches) about his country, upon which he replied: "It is conterminous with the country of Ta-ts'in, and considering it a dependency, it is now my native country which has control over it" (與大秦國相鄰爲其統屬今本國所管之). Since Syria had been conquered and was being held by the Fatimide Caliphs residing at Cairo at the end of the tenth Century, the mission referred to seems to have come from the Fatimide portion of the Ta-shī territories.

6. Fu-lin = Bethlehem.

My identification, which may at first sight seem strange, is based on the Nestorian inscription, in which it is shown that the priests, with their "luminous religion," came from Ta-ts'in, and that "*a virgin gave birth to the holy one in Ta-ts'in* (室女誕聖於大秦)."¹ Since Ta-ts'in, according to all Chinese accounts, is identical with Fu-lin, this is equivalent to saying that "*a virgin gave birth to the holy one in Fu-lin.*" The old sound of these two syllables, as shown above, was, or could be, *pat-lam*; and it seemed to me that "Bethlehem" is a much more appropriate etymology than *polin*. In those days, when an ecclesiastical current ran through the politics of the world, east and west, Chinese literature called the great nations by the birth-place of the founders of their religions. Thus the *T'ang-shu* account of India (chap. 221^A, p. 24^B) is introduced by the words "The country of T'ién-chu, also called Mo-k'ié-to,"² because Mo-k'ié-to, i. e. Magadha, was the little country where Buddha was born. Later on Arabia received its name *T'ién-fang* (天方, "the Heavenly Square," i. e. the Kaaba) from the sanctuary in Mohammed's birth-place. Similarly we read in Chinese books: "Ta-ts'in, also called Fu-lin," i. e. Bethlehem, because it was the birth-place of Christ.

7. The Language of Fu-lin.

We possess about a dozen transcriptions in Chinese characters said to represent words of the language of Fu-lin. They occur in the eighteenth chapter of the well-known cyclopædia *Yu-yang-tsa-tsu* (酉陽雜俎) by Tuan Ch'ōng-shī (段成式), who died in 863 A. D.³

The most reliable edition of this work, the quotations from which in cyclopædias, dictionaries and concordances of the present dynasty contain a number of fatal misprints, is the one published in the Ming collection *Tsin-tai-pi-shu* (津逮秘書), a rare work, of which there is a copy among the Chinese books of Columbia Library in New York. It appears that a

¹ See Havret, *La stèle chrétienne*, I, p. XXIII.

² 天竺國或曰摩伽陀.

³ Giles, *Chinese Biogr. Dict.*, p. 788.

bibliophile by the name of Hu Chōn-hiang (胡震亨) had planned the publication of a collection of rare prints under the title *Pi-ts'ö-hui-han* (祕冊彙函), but that before the work saw the light, the blocks from which it was to have been printed were partly destroyed in a conflagration, when the damaged stock of blocks fell into the hands of Mau Tsin (毛晉, 1598—1657 A. D.), who published it under the above title with a number of additions constituting the greater part of the collection, in all 144 works. The texts added by Mau Tsin bear on every page the name of his studio *Ki-ku-ko* (汲古閣), and the *Yu-yang-tsa-tsu* is among them.¹

The best edition next to this is the one of the collection *Hiau-tsin-t'au-yüan* (學津討原), published in 1805 by Chang Hai-p'öng (張海鵬) in Chau-wōn near Soochow,² who copied his text from Mau Tsin's edition, which he compared with original sources.

The eighteenth chapter of the *Yu-yang-tsa-tsu* is inscribed *mu-p'ien* (木篇), i. e., "chapter on trees," and treats chiefly on exotic trees and shrubs, many of which are said to be indigenous of India, Persia, or Fu-lin, giving the names used in those countries in the shape of transcriptions. I have tried to identify some of these names with the assistance of my colleagues Professors R. Gottheil and A. V. W. Jackson, and have come to the conclusion that they are neither Latin nor Greek, but Syriac.

As to the question who may have supplied the information regarding these foreign words, we receive a clue in the description, on p. 9,³ of the *Asa foetida* tree, called *a-weï* (阿魏). Having said that it comes from K'ié-shō-na (伽闍那) in Northern India, i. e. Ghazna in the present Afghanistan, where it is called *hing-yü*,⁴ and that it also comes from Persia, where it is called *a-yü* (阿虞), and having outlined his description of the tree, the author continues: "This is identical with what the priest Wan of the Fu-lin country says; the priest Ti-p'o [Dēva?] of the Mo-kié-t'ö [Maghada] country says, etc. (拂林國僧彎所說同摩伽陀國僧提婆言 etc.)."

¹ *Hui-ko-shu-mu*, IV, pp. 54—63.

² See my "*Die Länder des Islam nach chinesischen Quellen*," p. 17.

³ I shall quote numbers of pages from the edition of 1805.

⁴ 形虞 = Skt. *hing*, Hind. *hing*, Dakh. *hing*, and similarly with various foreign writers. See Yule, *Anglo-Indian Glossary*, s. v. Hing.

We may be allowed to assume from this passage that the information on plants growing in Fu-lin and their native names were supplied by a priest coming from Fu-lin called Wan. Here two priests, the one of Fu-lin (Bethlehem), the other of India (Magadha), are placed in contrast with each other as representing Christian and Buddhist sources of information.

The following extracts are from the *Yu-yang-tsa-tsu*. The headings ("The Olive," "The Fig," etc.) have been added by me.

1. *The Olive* (p. 10^B).

"The *ts'i-t'un* tree (齊 橄, Canton Dial. *ts'ai-t'ün*) comes from Po-sši (Persia). It also comes from Fu-lin. In Fu-lin it is called *ts'i-t'i* (齊 虛, Canton Dial. *ts'ai-t'ai*). The tree measures two or three chang (= 15½ or 23¼ feet¹) in height. Its bark is green; it has white blossoms like the pumelo (*yu*, 柚), and these are very fragrant. The fruits are like those of the *yang-t'au* (楊 桃, *Actinidia chinensis*, Pl., "a climbing shrub which bears edible fruit about the size of a plum," Henry, "Chinese names of Plants," in *J. of the China Branch, R. As. Soc.*, 1887, p. 281) and ripen in the fifth month (June). The inhabitants of the west press them into oil used for frying cakes and fruits, as we in China use *kü-shōng* (巨 勝, a kind of hemp seed? Very doubtful, cf. Bretschneider, *Botanicum Sinicum*, III, pp. 376—378)."

There can scarcely be any doubt about the identity of this tree with the olive. *Ts'ai-t'ün* is Persian and Turkish *zeitun* زيتون, and *ts'ai-t'ai* of the language of Fu-lin is Aramean *zaita* زایتا. See Immanuel Löw, *Aramäische Pflanzennamen*, p. 136, who says that the word applies both to the tree (*Olea europaea*, L.) and its fruit. No such name is known in Greek.

¹ The foot of the T'ang Dynasty, during whose reign the text of the *Yu-yang-tsa-tsu* has originated, was much smaller than the present Chinese foot. Cf. my notes in "Bausteine zu einer Geschichte der chinesischen Literatur," *T'oung-pao*, Vol. vii, pp. 502—505. The Chinese foot, *ch'ü*. 尺, of the K'ai-yüan period (713—742 A. D.) measured about 23 ½ cm., or say 9 ¼ inches English measurement. This has to be taken into account in forming an approximate idea of the several sizes placed on record in our text. The *chang*, 丈, or Chinese rod, which is now usually taken as 11 ¾, would thus correspond to scarcely 7 ¾ English feet in the T'ang period.

2. *The Fig* (p. 12^B).

"*A-i* (阿驛, Canton Dial. *a-yik*). In the country of Po-ssi (Persia) they call it *a-i* (阿駟, C. D. *a-yik*; the second character was read *jit* or *yit* during the T'ang period, see *T'ang-shu-shih-yin*, chap. 13, p. 4). In Fu-lin it is called *ti-ni* (底欄; the second character appears as 珍, *chön*, in all the other editions and quotations I have seen, a mistake which has clearly arisen from a variant of the second character 杵, K'ang-hi, Rad. 75, 5, being confounded with 珍, another form for *chön*). The tree grows to a height of 14 or 15 *ch'i* (about 11 feet). Twigs and leaves are plentiful and luxuriant. Its leaves have five lobes (葉有五出) like those of the *pei-ma* (稗麻 = 蓖麻, *Ricinus communis*). The plant has no flowers,¹ but fruits. The fruit is reddish like the *pei-tzi* (稗子 = 稗柿子, the Chinese *Diospyros glutinifera*?), and its taste resembles that of the sweet persimmon (甘柿, *kan-shih*). Once a month there is a crop."

The *Pön-ts'au-kang-mu* (chap. 31, p. 26) has under the head of *wu-hua-kuo*, the "flowerless fruit," the name *ying-jü-kuo*, 映日果, representing the old sound *ang-it* and apparently a transcription of Hindustani *anjir*. The Persian name, according to the *Yu-yang-tsa-tsu* is *a-yit* = *ayir*, which is near enough, though not as perfect a transcription as *ang-it*, to Persian *anjir* الجير, a fig. The Aramean name, according to Löw, p. 390, is *te(n)ta* ܬܢܬܐ, or *tēna* ܬܢܐ, cf. Biblical *teēnah* תֵּעֵנָה. Our Chinese transcription *ti-ni* is certainly much nearer the Aramean word than the Greek *συκη* for fig, or *ἐπιωτός* for caprificus.

3. *The Myrtle* (p. 11^B).

"The *mo* tree (沒, Canton Dial. *mut*, used up to the present day as a transcription for *mur*, the name given to the "myrrh" in several western Asiatic languages, but here clearly resorted to as a transcription for Persian, or Pehlevi, *mūrd* مود, which

¹ A botanical prejudice, which has caused the Chinese to call the *Ficus carica* the "flowerless fruit" (*wu-hua-kuo*, 無花果) and induced Albertus Magnus to say of the fig-tree: "fructum profert sine flore" (*De vegetabilibus*, ed. Meyer and Jessen, Berlin 1867, p. 386).

Professor Jackson informs me occurs in the Bundelesh in the sense of "myrtle") comes from Po-ssī (Persia). In Fu-lin it is called *a-tz'i* (阿 搓, the last character being also read *so*, *tso* and *tsok*, K'ang-hi, Rad. 120, 10. and Chalmers' *K'ang-hi*, p. 219). It grows to a height of one chang ($7\frac{3}{4}$ feet) and more. Its bark is greenish (or, blueish) white. Its leaves resemble those of the *huai* (槐, now *Sophora Japonica* L., but possibly differing in ancient times, see Bretschneider, *Bot. Sin.*, II, p. 379), though they are longer. The flower resembles that of the *Kü* (橘, Citrus of some kind), and it has large seeds (or, berries), black in colour, resembling in size those of the *shan-chu-yü* (山 茶 莢, *Cornus officinalis*, S. & Z., see Bretschneider, *Bot. Sin.* II, p. 326 and III, p. 507 seq.). Their taste is sourish sweet and they are eatable."

I do not hesitate to identify the botanical features of this plant with those of the myrtle, the Aramean name of which is *asa* 𐤀𐤍𐤁𐤏; Löw, p. 50: *myrtus communis*, L.

4. *Galbanum* (p. 11).

"*Pi-ts'i* (𐤀𐤏𐤕𐤓, Canton Dial. *pīt-ts'ai*) comes from Po-ssī (Persia). In Fu-lin it is called *han-po-li-t'o* (預 勃 梨 陀; this is the reading of the *Tsin-tai-pi-shu* edition; other editions have substituted 𐤀𐤏𐤕 *tu*, or *tuk*, for the first character, and the *T'u-shu-tsi-ch'öng* gives it this sound, which is clearly an error easily explained by the similarity of the two characters, by adding in a scholion: 音 奪, 'having the sound *to*,' C. D. *tüt*; the edition of 1805 prints 預, *hü*, or *huk*. Regarding *han*, 預, see K'ang-hi, Rad. 181, 3). It grows to a height of fully one chang ($7\frac{3}{4}$ feet) and has a circumference of more than a *ch'i* ($9\frac{1}{4}$ inches). Its bark is green, thin and very glossy. The leaves are like those of the *a-weï* (*Asa foetida*), each three leaves growing on the twigs. It has neither flowers nor fruits. The inhabitants of the west usually cut them in the eighth month (September), and till the twelfth month (January) further trimming takes place. The new twigs are thus extremely rich and juicy, whereas without the trimming they would wither and die. When cut in the seventh month (August), the twigs yield a yellow juice somewhat like honey and slightly fragrant, which is used as a medicine for certain cures."

The Cantonese sound *pūt-ts'ai* is an excellent transcription of Persian *bīrzay* بیرزی, "Galbanum" (Johnson, p. 267). Its Aramean equivalent is *chelbānita* ܝܠܒܢܝܬܐ, the product of *Ferula galbaniflua*, Boiss. & Buhse, according to Löw, p. 163. The defenders of the identity of Fu-lin with Constantinople might point to Greek *χαλβάνη*, which is indeed its botanical equivalent, but Professor Gottheil informs me that *-ita* is a characteristic Aramean ending, which distinguishes it from other semitic dialects (bibl. *chelbenah* חלבנה, etc.) as well as from the Greek and Latin forms of the word, *χαλβάνη* and *galbanum*.

5. *The Nard* (p. 12).

"*Nai-chi* (柰祇. The first character according to K'ang-hi, Rad. 75, 9, could be read 乃 曷 切 = *not*; the second, as equivalent to 祇, could be read 丁 尼 切 = *ti*, Rad. 113, 4; the *Tsin-tai-pi-shu* edition confounds it with 祇, Rad. 113, 5. The old sound may thus be reconstructed as *not-ti*, which may stand for *nar-ti*, or *nard*) comes from the country of Fu-lin. It is a herbaceous plant (*miau*, 苗), three or four *ch'i* in height. Its roots are of the size of duck's eggs, its leaves are like garlic (*suan*, 蒜, *Allium sativum* L.). From the centre of the leaf rises a twig of great length, and on the stem there is a flower, six-lobed, of reddish white, with a brownish calyx, forming no fruit. The plant grows in the winter and dies in the summer, and it is related to our greens or wheat cereals. Its flowers are pressed into oil used as an ointment against colds. The king of Fu-lin and the nobles in his country all use it."

The name of this plant may be the Persian *nard* نرد, or Biblical *nard* נרד, or belong to any other dialect or language, since it seems to be international. Our author does not say anything about the language of Fu-lin, as he does in other accounts, and it apparently "comes from Fu-lin," because it is so largely used there. Löw, p. 368, gives *shebbalta* ܫܒܒܠܬܐ as its Aramean equivalent.

6. *Jasmine* (p. 12).

"*Yê-si-mi* (野 悉 蜜, Canton Dial. *yé-sik-mat*) comes from the country of Fu-lin. It also comes from the country of

Po-ssi (Persia). It is a herbaceous plant, seven or eight *ch'i* in height. Its leaves are like those of the plum-tree and grow ample all the year round; its flowers are five-lobed and white, and they form no fruits. When the blossoms open out, the whole country is filled by their flavour resembling (in this respect) the *chan-t'ang* (詹糖, a doubtful tree with fragrant flowers, Bretschneider, *Bot. Sin.* III, p. 467) of Ling-nan (Canton). The inhabitants of the west are in the habit of gathering its flowers, which they press into an oil of great fragrance and lubricity."

Persian *yasmin* ياسمين and Aramean *yasmin* ياسمين are clearly the equivalents of this name *yé-si-mi*, which has been known in China since about the year 300 A. D., when it was described in the *Nan-fang-ts'au-mu-chuang* (南方草木狀, chap. 1, p. 2) as being introduced by foreigners in Canton under the name of *yé-si-ming* (耶悉茗). In another passage of this work (chap. 2, p. 3) the Henna plant is said to have been introduced by foreigners together with the *yé-si-ming* and *mo-li* from the country of Ta-ts'in. The Jasmine plant and the *mo-li-hua* (茉莉花) are now synonyms, but since *mo-li* is described in a separate paragraph, in which it is said that "its flowers are white like those of the *ts'iang-mi* (薔薇, 'wall rose', Bretschneider, *Bot. Sin.*, III, p. 302) and its fragrance exceeds that of the *yé-si-ming*", it appears that in 300 A. D. it denoted some other fragrant garden plant, imported from Syria together with its name *mo-li*. The latter might be connected with *molo*, محلة (= *μολο*, Löw, p. 317: *Peganum Harmala* L.). The old work referred to contains a number of other botanical names clearly of western origin, such as *hün-lu* (薰陸, old sound *hun-luk*), for "frankincense," which may be a transcription of Turkish *ghyünluk* كوندك (cf. *R. O.*, p. 266 seq.), or *ho-li-lo* (訶梨勒, Canton Dial. *ho-li-lak*), the *Terminalia Chebula*, Retz, or *Myrobalan*, called *halilag* הלילג and similarly in old Hebrew medicinal works (Löw, p. 129). But since they have no immediate bearing on the Fu-lin problem, I shall not attempt to trace these names.

I do not wish to commit myself to identifications about which I do not feel tolerably confident both from the botanical and the linguistic point of view; but I hope to return to the subject as soon as I can offer some plausible suggestions

as to the five remaining plant names said to belong to the language of Fu-lin, viz: *a-po-ch'ön* (阿勃參), *a-pu-to* (阿蔀譚), *kün-han* (群漢), *a-li-ho-t'o* (阿梨訶訛) and *a-li-k'ü-fa* (阿梨去伐?).

As to *a-pu-to*, stated (p. 9^B) under the name *po-na-so* (婆那娑) to come from Persia, the *Pön-ts'au-kang-mu* (chap. 31, p. 25) refers this name to the Jack fruit (*po-lo-mi*, 波羅蜜, *Artocarpus integrifolia*), and gives as its Fu-lin equivalent *a-sa-to* (阿薩亭). But I doubt whether the Jack fruit tree occurs in Syria, to say nothing of Greece. Mr. W. F. Meyers, in 1869, took up this subject in *Notes and Queries on China and Japan*, Vol. iii, p. 85, where he says: "It may be remarked *en passant*, that an identification of the above and other sounds attributed in the *Pön-ts'au* to the language of Fu-lin might be of service in determining the precise region that is indicated by this name in Chinese literature." The few examples I have endeavoured to trace to their real linguistic origin seem to contain a broad hint as to the language of Fu-lin being Aramean, and to the country where it was spoken not being Constantinople, but Syria. Pure Syriac, or Aramean, was particularly the vernacular in use with the Nestorians not only in Syria, Mesopotamia, Chaldæa and Persia, but also in India, Tartary and China, whereas other denominations used a kind of Syriac mixed with Arabic and even Greek elements. See Assemani, *op. cit.*, p. 377 seq.

8. Pseudo-Fu-lin.

The account of Fu-lin as placed on record during the Sung dynasty, probably in connection with an embassy of 1081 A. D., has puzzled the Chinese as it is liable to puzzle us, if we compare its detail with that of older texts. It occurs in the *Sung-shih* (chap. 490, cf. *R. O.*, pp. 62—64, 108—109) and has been reproduced by Ma Tuan-lin (*Wön-hiën-t'ung-k'au*, chap. 330, cf. *R. O.*, pp. 88—91, 119—120). Ma Tuan-lin refers to "the historians of the Four Reigns" (四朝國史, cf. *R. O.*, p. 91, note), who held that "this country had not sent tribute to court up to the time of Yüan-fōng [1078—1086], when they sent their first embassy offering local produce", and he draws attention to certain discrepancies in the accounts of the T'ang and Sung dynasties.

In the interpretation of this mysterious text which I offered twenty-five years ago (*R. O.*, pp. 298—301) I had pointed out the possibility of its covering the Seldjuk dominions in Asia Minor. I am still inclined to maintain this view on geographical grounds, but venture to suggest a few slight changes in the text, which would place us in the position to adapt its contents to the political condition of the country in 1081 A. D., when its ruler is said to have sent ambassadors to China. The king, in the text referred to (*R. O.*, pp. 62 and 108: N 3) is styled *Miê-li-i-ling-kai-sa*, 滅力伊靈改撒, in Cantonese *mîl-lik-i-ling-koi-sât*. I still think that the two last characters, the old pronunciation of which must have been *kai-sât*, stand for Greek *καῖσαρ*, and that *ling*, 靈, is a somewhat imperfect attempt to render the sound *Rûm*.¹ “*Rûm kaisar*” would have to be looked upon as the equivalent of the title “Emperor of Rome, or the Romans” placed before the Chinese court in the garb of a Turkish combination analogous to such titles as “*Türgâsh kakhan*,” i. e. “the Great Khan of the *Türgâsh*” and many others occurring in the Old-Turkish stone inscriptions. The three first characters *miê-li-i* would represent the name of the ruler who calls himself “Emperor of Rome.” I have (*R. O.*, p. 299) drawn attention to the anachronism committed by the several learned sinologues who identified the name with that of Michael VII Parapinaces, who had been deposed and withdrawn into a convent since 1078 A. D. This was the reason which had induced me to think of the Seldjuk Soliman as the ruler adding the title “*kaisar*” to his own as “king of *Rûm*.” I did not realise then that in 1081, when that embassy arrived in China, another person lived in Asia Minor who actually claimed, and was subsequently granted, the title *καῖσαρ*; and I now agree with Chavannes in referring to Nicephorus Melissenus, the pretender who claimed to be emperor just about the time when the embassy referred to arrived in China. Michael VII Ducas had withdrawn into the convent of Studion early in 1078, when one of this generals, Nicephorus Botaniates, who had been stationed in Phrygia, came to Constantinople and was crowned as Michael’s successor on the 13. April 1078. He had to fight a number of claimants who would not

¹ It may not seem to be a scientific proof, if I refer to a Pidjin-English conversation with a Chinese cook, who asked for “one bottle that *leng* (rum)” to be served with a plum pudding.

recognise his authority. Chief among these was Nicephorus Melissenus, the descendant of a powerful family and husband of the sister of Alexius Comnenus, the emperor who succeeded Nicephorus Botaniates. Nicephorus Melissenus had made an agreement with the Seldjuk Turks of Iconium to the effect that, in consideration of their assisting him in gaining the throne, he would divide with them the provinces conquered by their united forces. No sooner was he sure of this support than he clad his feet in purple shoes, the insignia of Imperial dignity, and began to march about in Anatolia with the troops of his allies, the Turks. All the cities he approached opened their doors and recognised him as emperor, though he on his turn declared these same cities to belong to the Turks, so that through his treason the entire former proconsular part of Asia, Phrygia and Galatia fell into the hands of the Turks. From Nicaea he prepared an attack on Constantinople. Alexius, then a mere general, was instructed by Botaniates, the emperor, to meet him, but for reasons of his own he did not proceed and handed over command to a feeble eunuch, who had to withdraw from Nicaea at the end of 1080. Melissenus intended to attack Constantinople early in 1081, when after a medley of intrigues his brother-in-law Alexius was elected emperor by the acclamation of his army. Melissenus then joined arms with him, and after the two armies had taken the capital, the two relatives divided the empire between them. Alexius got the European provinces, *Melissenus received an apanage and the title $\kappa\alpha\iota\sigma\alpha\rho$* (Anna Comnena, *Alexias*, ed. Schopen, Vol. i, p. 116. For further details see the historical works of Anna Comnena, Jo. Cinnamus and Nicephorus Bryennius in Niebuhr's *Corpus Scriptt. Hist. Byzant.*, and the abstract in W. H. Waddington's paper "Nicéphore Mélissène, prétendant au trône de Byzance" in *Revue numismatique*, Nouv. sér., Vol. viii, pp. 393—400).

Although the title "kaiser" is thus shown to have been officially conceded to Melissenus in the beginning of April 1081, the entire political situation seems to suggest that he actually claimed it, and probably had coins cast in his name as kaiser, ever since his commencing to pose as a pretender some time in 1078. If the embassy that arrived at the Chinese court in 1081 started from Asia Minor some time in 1080, there were at the time practically two rulers in the country dividing

supreme power between themselves, viz.: 1, Melissenus, the pretender, who considered himself emperor of Rome and claimed the title "kaisar", and 2, his ally, the Sultan of Iconium, who supported his claims and whose name was Soliman. Taking all this into consideration, we cannot well assume Soliman to have represented himself as *kaisar* in his credentials to the court of China. The one man who was a *kaisar* in Asia Minor by usurpation, if not by right, at that time, was Melissenus. This has led me to again examine the three characters preceding the words *ling-kai-sat* (= Rūm kaisar), and which I think might be a transcription of the kaisar's name, viz. *Mié-li-i*, 滅力伊, in Cantonese: *mīt-lik-i*.

The stumbling block in this name, it appears to me, is the third character 伊, *i*. In trying to find a solution to help us out of the difficulty I beg to call attention to a practice, occasionally noticeable in the prints of the Sung dynasty, by which some characters may be deprived of their radical or written with the wrong radical. Thus the character 獅, *shī*, "lion," in the *Hōu-han-shu* (*R. O.*, p. 101, E 39) appears as 師 in the Sung edition of 1242 (see facsimile, *R. O.*, p. 9). Chau Ju-kua (chap. 1, p. 17^B) has 碇, *ting*, for 碇, *tién*, "indigo". In the ethnical name *Sié-yen-t'o*, which is clearly the equivalent of the name *Sir Tardusch* in the Old Turkish stone inscriptions, the second character 延, *yen*, must have been substituted for some character read *tan* (= *tar*), e. g. 誕, the original radical being suppressed (see my *Nachworte zur Inschrift des Tonjukuk*, passim). If we assume, therefore, that the 伊 in the kaisar's name stands for what in its original transcription may have appeared as 𠂔, the radical No. 140 being suppressed, such a change would not be without precedent. According to the *Chōng-tzī-t'ung* (quoted in K'ang-hi. Rad. 140, 6) 𠂔 was used by mistake for 莠, and this character again, according to the *Tsi-yün*, could have the sound *sin*, or *sun* (聿尹切音筭, K'ang-hi, Rad. 140, 4; cf. Chalmers' *K'ang-hi*, p. 206^B, where among other sounds *sun*, 心盾, is given to the two interchangeable characters 莠 and 𠂔). The kaisar's name may thus in its transcription be reconstructed into *Mié-li-sun*, or Cantonese *Mīt-lik-sun*, the finals *t* and *k* of which may disappear by elision so as to leave us as the equivalent of the probable old sound some such name as *Mī-lissun*. This I venture to look upon as the equivalent, trans-

mitted probably by an interpreter who spoke some Turkish dialect, of the Greek name *Μελισσηνός*.

I am encouraged in this view by the mention of a coin the description of which, after a slight, but plausible change in the text, seems to be traceable. The passage I refer to, *R. O.*, N 16) speaks of gold and silver coins without holes being cast in this country, which the people are forbidden to counterfeit and which are described by the following words:

面鑿彌勒佛皆爲王名

The change I wish to suggest in the text is the substitution of the character 背, *pei*, "the back," for 皆, *kié*, "all, alike;" "that is." The two characters are quite similar to each other and may easily be confounded. Moreover, *kié* gives a poor sense, whereas *pei* is constantly used in opposition to 面, *mién*, "the face," the two terms in numismatic texts meaning the "obverse" and "reverse" of a coin. I do not, therefore, look upon the words *mi-lö-fo* (彌勒佛), the standard transcription for "Maitrêya Buddha," as the king's name, but translate: "on the obverse [of the coin] is engraved a Maitrêya Buddha, on the reverse there is the king's name." It is quite probable that the ambassadors of 1081 brought coins with them to China and on enquiry declared that the legend on the reverse represented the king's name, and that some of these coins had been preserved in the Imperial collections at K'ai-fōng-fu. since according to Edkins (*Chinese Buddhism*, 2nd ed., p. 117, note) "the *Kin-shi-t'u-shu-pu* contains a rude representation of a gold coin of Mi-li-i-ling-kai-sa." I regret not to have had an opportunity of seeing the illustration referred to, because it might have given us a chance, rude though it probably is, to compare notes with a silver coin of Melissenus the pretender actually preserved to our days. The coin, which has been described by Waddington in the paper quoted from the *Revue numismatique*, is now in the Bibliothèque nationale in Paris. Mr. Waddington's illustration and description (Fig. 1) shows on the obverse the bust of the Virgin, facing, with hands held up in prayer, nimbus and the usual dress, the figure being described as μήτηρ θεοῦ in the customary abbreviation. On the reverse we find the legend Νικηφορω δεσποτη τω Μελισσηνω in five lines.¹

¹ Cf. Warwick Wroth, *Catalogue of the Imperial Byzantine Coins in the British Museum*, Vol. ii (London 1908), p. 539, and the illustration No. 11 on Plate LXIII.



M-P [ΘΥ]. Buste de face et nimbé de la Vierge, les mains élevées; le tout dans un grènetis.

Ἄ [ΚΕ·ΒΟΗΘΕΙ] ΝΙΚΗΦΩΡΩ ΔΕΣΠΟΤΗ·ΤΩ ΜΕΛΙ-
CHNΩ, en cinq lignes; le tout dans un grènetis.

Fig. 1.

Coin of Melissenus the pretender and Mr. Waddington's description.

It looks as if this coin has something to do with the one described in the *Sung-shi*. The Chinese scribe who first placed on record the details regarding it was, of course, not able to read the Greek legend on the reverse, but he must have been told by the ambassadors that it represented the king's name Melissenus. The portrait on the obverse may have been mistaken for that of Maitrêya, the Buddha of the future world so familiar to Chinese Buddhists,—a male deity, it is true, but generally represented as a beardless youth and very frequently with the nimbus round his head (cf. Grünwedel, *Buddhistische Kunst in Indien*, Berlin, 1893, p. 141: "in Schmuck und Tracht eines indischen Gottes oder altindischen Königs meist in sehr jugendlichem Alter").

I do not venture to throw out any guesses as to the motives which may have caused the Byzantine pretender and ally of a Seldjuk sultan to send a special mission to China. Nor am I in the position to throw light on the names mentioned in connection with the embassy of 1081. According to the Chinese text (*R. O.*, N 3) the king sent "*ta-shôu-ling*¹ *Ni-ssî-tu-ling* *Ssi-möng* (大首領你厮都令厮孟), which may stand for "the governor Nestorius Simeon", or "the governors Nestorius and Simeon." The two names, if we are not mistaken in explaining them thus, are followed by the words 判來, *p'an-lai*, which I now believe means that they came in company.

¹ Clearly a high official, since in the passage N 12 we are told that "the towns and country districts are each under the government of a *shôu-ling*." The *ta-shôu-ling* must have been superior to these local governors.

—bringing as tribute saddled horses, swords and pearls. I do no longer look upon the character *p'an* as part of the name. 判, now pronounced *p'an*, must have been identical in sound and tone with 伴 *pan*. K'ang-hi, Rad. 9, 5, quotes several T'ang authorities to say that the two characters are identical in sound (伴音判). This would entitle us to look upon the two characters as interchangeable and to assume that 伴來 may be a verb meaning "to come in company" similar to 伴遊, *pan-yu*, which is backed by passages in *P'ā-wōn-yün-fu*, chap. 26^A, p. 63^B, e. g. 誰伴老人遊, "who traveled in the company of the old man?" I am encouraged in offering this explanation by a passage of the *Sung-shi* (chap. 490, p. 16^B), where an Arab embassy is stated to have consisted of 1. the ambassador (*shì*, 使), 2. an assistant ambassador (*fu-shì*, 副使), and 3. a *p'an-kuan* (判官), or "companion officer," "attaché." Possibly the passage involves that "the king sent a *ta-shōu-ling*, accompanied by the Nestorian Simeon, or Simon, as attaché."

Professor Chavannes in his recent note on Fu-lin (p. 39) has made an important discovery in connection with the ruler of what I call Pseudo-Fu-lin, and this may, quite reasonably, have induced him to fall back on the former identification of Fu-lin with Constantinople. But since the Sung historians maintain that this Fu-lin had never sent any embassies to China before, this seems to involve its non-identity with the Fu-lin of the seventh and eighth century. Although merely a pretender, Melissenus was closely related to the Imperial court and his representatives ought to have been aware of the fact, if court missions had gone forward from Constantinople to China. The ambassadors, when cross-examined as to former relations between their government and the Chinese court, might have referred to the Fu-lin embassies of 643, 667, 701 and 719 A. D.¹ On the other hand, if these former missions had been sent by Christian patriarchs, whether of Antioch, Madain, or Bagdad, the kaisar's messengers could not well refer to them as having represented the Roman emperors whom they had to look upon as the predecessors of their chief. Their silence as to former relations would thus be explained. The *Sung-shi* account describes a mission from Fu-lin, it is true;

¹ See *R. O.*, p. 126: Index to Translations, s. v. "Embassies".

but I think this name had in the course of time grown into a general term applied to the Christian world at large. Originally designating the Nestorians as representing the Latin population of Syria or Ta-ts'in, the cradle of their faith, it was later on applied to other Christians, those of Byzantium under the Sung, and even the Pope of Rome under the Ming dynasty. It had grown into a term which covered a multitude of nations and of governments, like our "America," which may mean the United States in one sense and all possible countries in another.

Mr. Kingsmill and the Hiung-nu.—By FRIEDRICH HIRTH,
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IN his paper "Dr. F. Hirth and the Hiung-nu," published in the *Journal of the China Branch, R. A. S.*, Vol. xxxiv, pp. 137—141, Mr. T. W. Kingsmill tries to show that the Hiung-nu and the Huns were different nations. He refers to my paper, presented to the philological section of the Royal Academy of Munich, entitled *Über Wolga-Hunnen und Hiung-nu* (München, 1900). The main object of that paper was to establish the literary proof, based on a text of the *Weï-shu*, for the identity of the Hiung-nu of Chinese history with the Huns of Europe. Mr. Kingsmill denies this identity, but, as I propose to show in the following pages, fails to prove his point.

A subsequent paper, presented by me to the Hungarian Academy of Sciences in Budapest and published in the *Revue Orientale pour les études Ouralo-Altaïques*, Vol. ii, 1901, pp. 81—91, under the title of "Hunnenforschungen," and a third paper, "Die Ahnentafel Attila's nach Johannes von Thurócz," published in the *Bulletin de l'Académie des Sciences de St. Pétersbourg*, Fifth Series, Vol. xiii, pp. 220—261, were apparently not known to Mr. Kingsmill. A study of the Chinese sources quoted in them might have prevented several serious errors in his criticisms. These I consider interesting, because they illustrate better than anything else the difference in our methods of research. I have on several occasions discussed the principles by which I am guided in this respect (cf. my *China and the Roman Orient*, pp. 152, 170 et passim). In identifying the ancient Chinese accounts of foreign countries, we should above all endeavour to recognize facts, and only after these have been established, should the linguistic explanation of names be considered as furnishing additional evidence. Mr. Kingsmill's method is the reverse of

this. He is unfortunately possessed of a regular mania to discover etymologies, and his mind once being set on what he considers similarity in sound, all passages in Chinese contemporaneous authors which might warn him as being on the wrong track are ignored.

As an example we may consider the city of Ku-tsang (姑臧), mentioned in the short, but important text of the *Wei-shu* reproduced below on p. 42. In this text it is said that the merchants of this country (Su-tö, or Suk-tak, 粟特, Alans) often went to the country of Liang (Liang-chöu-fu in Kan-su) for trade¹ and that at the capture of Ku-tsang they were all made prisoners (先多詣涼土販貨及克姑臧悉見虜); and that "in the beginning of the reign of Kau-tsung [452—466 A. D.] the king of Su-tö (Suk-tak) sent ambassadors to ask for their ransom, which was granted by cabinet order (高宗初粟特王遣使請贖之詔聽焉)."

Mr. Kingsmill's imagination here forestalls all further research, so necessary in Chinese historical reading, by jumping immediately to one of his linguistic conclusions. "*Ku-tsang*," he says "*here is* the country called by Ma Tuan-lin Kweishwang, and by the Armenian writers *Kushan*. It formed the most powerful of the five states into which the Ephthalite kingdom was divided," &c. This is a characteristic example illustrating the dangers of basing historical inferences on mere similarity of sound. It is typical of Mr. Kingsmill's method: the sound of a word takes possession of his mind to such a degree that all logical reasoning is temporarily forgotten in the pursuance of a mere phantom. The nation known as Kui-shuang, or Kushan, is by Armenian writers referred to Bactria, by the Arabo-Persian reports to Tokharestan, Transoxania, &c. (Th. Nöldeke, *Tabari*, p. 115 note 2; cf. Éd. Specht, *Études sur l'Asie centrale*, I, p. 8 seqq.) and has nothing whatever to do with the Liang country of the *Wei-shu*. Liang was the seat of an independent prince of Hiung-nu extraction by the name of Tsü-kü Mu-kién (沮渠牧犍), who followed his father

¹ The Aorsi (Alans) carried on considerable trade, bringing Indian and Babylonian wares, which they received from the Armenians and Medians and transported on the backs of camels from the Caspian to the Palus Maeotis. By this means they had amassed considerable wealth, and wore ornaments of gold (Strabo, XI. 5, 8 p. 506, Bunbury, *A History of Ancient Geography*, London 1883, Vol. ii, p. 278).

Tsü-k'ü Möng-sun (蒙遜), as Prince of Ho-si (河西王) in that little dynasty known as "the Northern Liang," and whose biography is contained in the *Wei-shu* (chap. 99, p. 14^B seqq.). His troubles with his brother-in-law, the Toba emperor T'ai-wu, which have been described in my "Hunnenforschungen," led to the siege and final capture in 439 A.D. of Mu-kién's city of Ku-tsang. Before attempting guesses of any kind Mr. Kingsmill ought to have consulted the *P'ei-wön-yün-fu* (chap. 22^C, p. 150). There he would have found a number of passages concerning the city of Ku-tsang, the analysis of which would have revealed the real historical basis of this simple passage. But apart from this he might have read the whole account in plain French in Deguignes' *Histoire des Huns*, Vol. i, Part ii, p. 273. It was at this capture of Ku-tsang that merchants hailing from the distant west were made prisoners together with 20,000 inhabitants of the city, who were transferred to the Toba capital in Shan-si (*Wei-shu*, chap. 4^A, p. 21). Ku-tsang was the residence of the Tsü-k'ü princes, and according to the *Shen-si-t'ung-ch'ü* (quoted in the *T'u-shu-tsi-ch'öng*, Sect. 6, chap. 578, ku-ch'ü, p. 2) its ruins at some time or other were known to exist in close vicinity to the present city of Liang-chóu-fu in Kan-su.

With such fundamental errors before us we can understand why it is impossible for Mr. Kingsmill to arrive at correct results in the most simple question of Chinese research. To expose his errors would require a volume, and would entail more valuable time than we can afford. Moreover, it is difficult to contradict him, because he makes mere assertions and seldom supports his opinions by reasons based on literature. The following is another characteristic example.

Of the country of *K'ang-kü* (康居) he says: "As a general mess has been made by translators over this country of *K'angku*, a few words may be useful. *K'angku* first appears in Sz'ma Ts'ien, and is there, and, in the early Chinese authors, invariably *Kashgar*." No proof follows this startling assertion, but he goes on to speak about the descendants of Seldjuk in the eleventh century, winding up with a sly hit at those wicked Sinologues who venture to differ, in saying: "A little knowledge, says Pope, is a dangerous thing, and in no instance do we find a better exemplification of the general truth of the aphorism

than in our would-be Chinese authorities." I cannot say that this kind of logic will convince me that ancient K'ang-kü is Kashgar. Has Mr. Kingsmill ever come across the following passage, describing the road from Tun-huang to the west along the southern slope of the T'ien-shan to Su-lö [疏勒, i. e., the real Kashgar]. "which is the northern road;" "west of the northern road," the account continues, "you cross the Ts'ung-ling, whence you come out to Ta-yüan [Ferghana], K'ang-kü [Sogdiana] and An-ts'ai [the Aorsi; 北道西踰葱嶺出大宛康居奄蔡焉]"?

This passage occurs in the *Ts'ien-han-shu* (chapter 118, p. 6) and is certainly somewhat older than Mr. Kingsmill's story of the Seldjuks. Or does Mr. Kingsmill maintain that the Ts'ung-ling is not the Ts'ung-ling? I do not intend to recapitulate the arguments which have induced Chinese scholars to identify K'ang-kü with Sogdiana or some territory in this neighbourhood, but west, not east, of the Ts'ung-ling. These scholars, I have reason to believe, are perfectly satisfied with the "little knowledge" so dangerous to them according to Mr. Kingsmill.

Another fatal mistake committed a generation ago and repeated *usque ad nauseam* up to his recent effusion about the Hiung-nu, is his identification of Ssī-ma Ts'ien's An-ts'ai, also transcribed as Yen-ts'ai (奄蔡), the country of the Aorsi, subsequently called by western and Chinese authors alike Alan, or A-lan-na, with Samarkand. To arrive at this idea he has to do violence to a perfectly plain and simple passage in the *Shi-ki* (chap. 123, p. 5^B). It occurs in Ssī-ma Ts'ien's account of An-si (安息, in Cantonese *On-sak*), i. e. Parthia, the linguistic basis of which name was, I am glad to observe, first correctly recognized by Mr. Kingsmill as *Arsak*, the Chinese account substituting the name of its kings for that of the country (*Journal, China Branch*, etc., Vol. xv, p. 8, note 11). Unfortunately later editors have broken this text into two parts, 1. An-si (Parthia), and 2. T'iau-chī (Chaldæa). But

¹ The character 考, *k'i*, after 焉 *yen*, found in the present standard editions, has been clearly interpolated. It does not appear in the King-yu edition (1034—1038 A. D.; *Han-shu-si-yü-chuan-pu-chu*, chap. 1, p. 5). Chavannes (*T'oung-pao*, 1907, p. 170) is, therefore, right in not translating it at all.

since T'iau-chi is represented in the text as forming part of the Parthian empire, I presume that the line being broken before T'iau-chi is due to a misunderstanding. To me the passage reads as follows: 安息 &c. 其西則條枝北有奄蔡。黎軒條枝在安息西數千里臨西海&c

Speaking of An-si (Parthia), the author says in this passage: "West of it there is T'iau-chi (Chaldæa), in the north there is An-ts'ai (the Aorsi, or Alans); Li-kan (Syria) and T'iau-chi (Chaldæa) are several thousand *li* west of An-si (Parthia) near the western sea," &c.

The name *Li-kan* (黎軒) of the *Shi-ki* occurs in another transcription in the *Ts'ien-han-shu* (chap. 96^A, p. 14^B), according to which ambassadors from An-si (Parthia) brought as tribute to the emperor Wu-ti "big birds' eggs," i. e. ostrich eggs, and "jugglers¹ from *Li-kiên* (犁軒眩人)." Since this passage is clearly copied from a parallel passage in the *Shi-ki* (p. 13^B), the two names *Li-kan* and *Li-kiên* must have been identical in sound, though written with different characters in the two parallel passages. K'ang-hi's mediæval authorities also describe the two characters as being identical in sound.² The name occurs again in the *Hou-han-shu* (chap. 118, p. 9^B), which says: "The country of Ta-ts'in (Syria) is also called *Li-kiên* (大秦國一名犁軒)." Since this third transcription is linguistically identical with that of the *Ts'ien-han-shu*, I do not hesitate to look upon the *Li-kan* of the *Shi-ki* as a variant of the name which, in the *Hou-han-shu* and later records, is declared to be another name for Ta-ts'in, or Syria.

¹ A specialty of Syrian cities often sent abroad. Cf. Marquardt, *Das Privatleben der Römer*, 2. Aufl., p. 338, and Mommsen, *Röm. Gesch.*, V, p. 461. Jugglers and musicians came from Ta-ts'in (Syria) to China in 120 A. D. (*China and the Roman Orient*, p. 37).

² It appears, however, that the character 軒, *kiên*, had two ancient sounds, 1. *kan*, or *kin*, 2. *kem*. I refer to the work of Yang Shün (楊慎, died 1529 A. D.), reprinted in the *Han-hai* collection, Section 14, under the title *Chuan-chu-ku-yin-liao* (轉注古音略), where the character 軒 appears under the rhyme *yim* (十四鹽) with the following note: 漢地理志驪軒縣名在張掖力度二音. I do not quite understand on what authority this statement is made; but if *kiên* 軒 can be shown to have been read *kem* during the Han period, this would tend to support from a linguistic point of view my conjecture, made on commercial grounds, as to the identity of Chinese *Li-kan* with *Rekem*, or Petra (see *China and the Roman Orient*, p. 157 seqq. and 171).

Now Mr. Kingsmill, who is so fond of fanciful and ingenious combinations, has an entirely different idea. He combines the two names An-ts'ai and Li-kan, each of which may be shown from ancient texts to have a distinct sense, and gives the following explanation (*Journal, China Branch, &c.*, Vol. xiv, 1879, p. 7, note 9): "Im-ts'ai-li-kan 奄蔡黎軒. It seems most likely here that the two first characters are inverted and that we should read Ts'ai-im-li-kan, in the old pronunciation Sal-im-ar-kand for Salmarkanda, modern Samarkand, the Marakanda of Strabo and Ptolemy." And that in the face of the *Shi-ki* itself, on page 4, describing the country of "An-ts'ai" under this name pure and simple without any inversion and without the alleged appendix Li-kan. This description reads as follows: "An-ts'ai, about two thousand li northwest of K'ang-kü, is a nomad country and has in the main the same customs as K'ang-kü. Its archers number fully a hundred thousand. It lies close to a great *ts'ö*, which has no shores; for they say it is the 'Northern Sea' (奄蔡在康居西北可二千里行國與康居大同俗控弦者十餘萬臨大澤無崖蓋乃北海云)."

Sü Sung (*Han-shu-si-yü-chuan-pu-chu*, chap. 1, p. 30) makes the following remarks in connection with the last sentence of my translation: "The *Shuo-wön* defines the word *ai* (崖) as meaning 'a high border;' this means that, since in looking into the far distance you do not see high shores, the raised parts must appear as low." A *ts'ö* (澤) thus described cannot be an ordinary "marsh." This, it is true, is the standard sense of the word; but broad sheets of deep water have also been called *ts'ö*, e. g. the T'ai-wu Lake near Soochow, which is known as "Chön-ts'ö" (震澤), or the Lob-nor, which is called Yen-ts'ö (鹽澤), i. e. the "Salt Lake," or Lake Balkash, which is called "the biggest *ts'ö* in the north-western territories (西北境最大澤;" *Si-yü-shui-tau-ki*, chap. 4, p. 42). Moreover, the text adds distinctly that "they say it is the 'Northern Sea' (北海)," which would involve a gross exaggeration, if *ta-ts'ö* meant a mere marsh. It is for these reasons that I have translated "a great sea," and not "a great marsh," as Mr. Kingsmill does.

I do not, of course, object to the more literal translation, as long as it is understood that, since it is said to be "the Northern Sea," we must not think of a marsh in the or-

dinary sense of the word. I have, in my first paper on the subject, thought of the Black Sea as being covered by this *ta-ts'ö*, but since its first mention goes clearly back to the oldest notice of the An-ts'ai (Aorsi), as placed on record in the *Shi-ki*, we have to look for their seats in their original homes between the banks of the Sea of Azof and the Caucasus. The Sea of Azof is described as a *palus*, i. e. "a swamp," by Pliny and other Romans. Early Greek writers speak of a *Μαῖωτις λίμνη* (Dionysius in C. Müller, *Geogr. Graeci Minores*, II, p. 111), and Jordanes (Mommson, p. 89 seqq.), in his account of the Hunnic irruption, also styles it *Palus Mæotis*. This corresponds to what we know about the physical condition of its shores, which prompts Karl Neumann (*Die Hellenen im Skythenlande*, p. 536) to say: "Es verrät Sachkenntnis, wenn die Griechen die Maitis nie ein Meer, sondern stets eine Limne nannten." Herodotus (IV, 86) held that the Mæotis was not much smaller than the Pontus itself, and Ptolemy exaggerates its northern extension through more than six degrees of latitude (Bunbury, *op. cit.*, Vol. ii. p. 591 seq.). This may have been a popular error among the ancients long before Ptolemy, repeated also at the court of the Indoscythians, where Greek traditions had been taken over from Bactria, and where Chang K'ien in 127 B. C. collected his notices of western countries subsequently reproduced in the *Shi-ki*. The Mæotis is said to be frozen in its northern part during the winter (K. Neumann, *op. cit.*, p. 65), and this, too, may have helped to challenge comparison with the "Northern Sea" (北海), if this term refers to the Arctic Ocean as it apparently does in a passage of Pliny (II, 67), who says: "Ingens argumentum paludis Mæoticae, sive ea illius oceani sinus est, ut multos adverte credidisse, sive angusto discreti situ restagnatio."

It appears to me that the chief mistake made by Mr. Kingsmill in his attempts at identification is the ignoring of information, placed on record in notices quite as valuable as, though later than, those of Ssi-ma Ts'ien. I am, of course, fully aware that the *Shi-ki*, in its chapter 123, is the very oldest source regarding the Chinese knowledge of Western Asia; but we should not forget that between the time when Chang K'ien laid his first report before Wu-ti (126 B. C.) and the time of Ssi-ma Ts'ien's death, not much more than forty years may have elapsed and that much of the geographical

knowledge of the Chinese during the earlier Han Dynasty was placed on record soon after the *Shi-ki* was completed. Pan Ku's account in the *Ts'ien-han-shu*, though compiled towards the close of the second century A. D., was based on records dating from the earlier Han Dynasty itself. Pan Ku's own brother, Pan Chau, must have returned from his famous expedition to the west with a tolerably complete knowledge of the facts placed on record in the *Hou-han-shu*, and during the period of the Three Kingdoms, at the beginning of the third century A. D., the knowledge of the west gained three hundred years before cannot have been forgotten, though added to and modified. Even the geographers of the Sui and the T'ang dynasties (the latter with one notable exception, the division of foreign territories into nominal Chinese administrative districts), being so much nearer in time than we are to the Han period, must have been in the possession of traditions much more valuable as a source for identification than the linguistic speculations of a modern European. Mr. Kingsmill's Sal-im-ar-kand is one of these speculations. Why ignore what later, though still ancient, traditions tell us about An-ts'ai? That so-called "old tradition which made Selm, the son of Feridun, the eponym of Samarkand" is extremely doubtful. The mention of a number of other supposed founders such as Alexander the Great and Shamar Abu Karib of South Arabia (Yakut, Vol. iii, p. 133), shows how little we know about the origin of the city, so that nobody can tell whether or not such a name existed at all during the second century B. C. Of An-ts'ai, however, we read in the *Hou-han-shu*, chap. 118, p. 13: "The country of An-ts'ai has changed its name into A-lan-liau (奄蔡國改名阿蘭聊國)." Professor Chavannes has proved beyond a doubt that by this name two different countries are covered, the one being called *A-lan*, the other *Liau* (*T'oung-pao*, 1907, p. 195 note 2, and 1905, p. 559 note 1); and according to the *Wei-liao* (l. c., p. 32) An-ts'ai is also called A-lan (奄蔡國一名阿蘭).¹

¹ Chavannes (*T'oung-pao*, 1905, p. 558, note 5) remarks with regard to this passage: "Hirth a bien montré (*China and the Roman Orient*, p. 139 note 1, et *Über Wolga-Hunnen und Hiung-nu*, p. 249—251) que le nom Yen-ts'ai (prononcé *An-ts'ai*) pouvait être la transcription du nom du peuple que Strabon appelle les Ἀρσάοι. Le témoignage du *Wei-liao* que

But we have yet another transcription of the foreign name represented in Chang K'ien's An-ts'ai. In the biography of the General Ch'ön T'ang (陳湯, *Ts'ien-han-shu*, chap. 70, p. 7^B) we are told that Chi-chü, the legitimate Shan-yü of the Hiung-nu, whom I look upon as the founder of Hunnic power near the confines of Europe (*Über Wolga-Hunnen*, &c., p. 269 seqq.) and who had been assigned to an unclaimed territory by his father-in-law, the king of K'ang-kü (Sogdiana), had attacked the capital of the Wu-sun and terrorized the population by his violence; that the Wu-sun were afraid to pursue him to his retreat, because an uninhabited waste on the western frontier obstructed the road for a thousand *li* (烏孫不敢追西邊空虛不居者且千里); and that, after having committed all possible atrocities, he built a fortified city and "sent ambassadors to exact annual tribute from the countries of Ho-su (the Aorsi) and Ta-yüan (Ferghana), which these did not dare to refuse (遣使責闐蘇大宛諸國歲遺不敢不予)." The scholiast Yen Shü-ku refers to Hu Kuang (second century A. D.) as having said that "about a thousand *li* north of K'ang-kü there is a country called An-ts'ai, another name of which is Ho-su (閩蘇)," and on this basis he concludes that the names An-ts'ai and Ho-su are identical. The two syllables *ts'ai* and *su* can easily be explained, both representing in their initials a sibilant in the transcription of foreign names and both representing a possible *sai*, *sa*, *so* or *su*. The *ho* of *Ho-su* (閩蘇) is read *hōp* in Canton, and *hak* in Foochow. This latter sound could easily be proved to stand for *har* or *ar*. But Chinese sound authorities class the character with the rhyme "27. 合," i. e. *hōp*, and this is precisely what they do with a number of characters having the same final as *an* 淹, e. g. 淹, which is even now read both *im* (英奄) and *yap* or *ap* (英業; see *T'ang-yün*, chap. 20 et passim; Eitel, *Cantonese Dictionary*, p. 190). Though quite different in sound at the present day, the two characters may have been interchangeable at some time or other, the old final

les *An-ts'ai* (Aorsi) ont pris plus tard le nom d'*A-lan* (Alani) explique d'ailleurs fort bien le terme *Alanorsi* qui, chez Ptolémée, embrasse à la fois les Alani et les Aorsi; il est vraisemblable que ce royaume comprenait deux peuples distincts, les Aorsi et les Alani, et qu'il fut connu d'abord sous le nom du premier d'entre eux (Aorsi), puis sous les noms de tous deux combinés (Alanorsi), enfin sous le nom du second seul (Alani)."

possibly holding the middle between *m* and *p*.¹ Yen Shi-ku is, therefore, probably right in assuming the identity of the two names. The crux in the identification with the Ἀορροι of Strabo is the old final *m* in the first syllable of *An-ts'ai*. Precedents like *Tam-mo*, 曇磨, for *Dharma* do not help us, because this transcription may stand for Pali *Dhamma*. I am in doubt about Sam-fo-ts'i (三佛齊, Palembang in Sumatra), which as suggested by Groeneveldt (*Notes on the Malay Archipelago*, p. 62, note 3) might be identical with Arabic *Sarbaza* of doubtful tradition. It is possible, though not certain, that the hill-name *T'am-man*, 貪漫山, the Saïan range, stands for *Tarban*, or *Türmäl*, of the Old-Turkish inscriptions (see my *Nachworte zur Inschrift des Tonjukuk*, pp. 41 seq. and 87 seq., and Parker in Thomson, *Inscriptions de l'Orkhon déchiffrées*, p. 196). But why must we have a linguistic precedent for *m* = *r* at all in the face of so much circumstantial evidence? We have other Chinese representatives of final *r*, which in their way might be called ἀπαξ λεγόμενα, e. g. Hüan Ts'ang's 耐秣陀, *nang-mot-to*, which stands for Skrt. *Narmmada*, the River Nerbudda (Eitel, 2nd ed., p. 107). Altogether I lay more stress on historical, than linguistic identification. The transcription *A-lan* (阿蘭) in the *Hôu-han-shu* and *Weï-liao* is clear and as little dependent upon differing ancient and dialectic sounds as any foreign name in Chinese records; it is as safe as if it were written in some alphabetic language to look upon it as representing the sound *Alan*, which in this neighbourhood and at the period of its first appearance in classical and Chinese literature alike can only apply to the Alans as a nation. According to the *Hôu-han-shu*, we have seen, the name *A-lan* had been changed from that of *An-ts'ai*, and Pliny (*Nat. Hist.*, IV, 80), speaking of Scythic tribes says: "alias Getae, Daci, Romanis dicti, alias Sarmatae, Graecis Sauromatae, eorumque Hamaxobii aut Aorsi, alias Scythae degeneres et a servis orti aut Trogodytae, mox *Alani* et Rhoxa-

¹ Pliny (VI, 38) refers to the Aorsi in one passage as *Abzoe*, and it appears that the codices here offer no variants of this exceptional form (see *Nat. Hist.*, rec. Detlefsen, I, 1866, p. 238), which may possibly be a mistake for *Arzoe*. But if this were not the case, it might help to explain the finals *m* and *p* in the two Chinese transcriptions. *Abzoe* might thus be a Latin mutilation of the Greek name heard with the digamma as Ἀφορροι.

lani." In other words, he holds that the Alani were nearly related to, or formerly called, the Aorsi. This view, supported by quite a number of other arguments, has been adopted by

自 及 其 在 粟
後 克 國 康 特
無 姑 至 居 國
使 城 王 西 在
朝 悉 忽 北 葱
獻 見 倪 去 嶺
虜 已 代 之
高 三 一 西
宗 世 萬 古
初 矣 六 之
粟 其 千 奄
特 國 里 蔡
王 商 先 一
遣 人 是 名
使 先 匈 溫
請 多 奴 那
贖 詣 殺 沙
之 涼 其 居
詔 土 王 於
聽 販 而 大
焉 貨 有 澤

modern European scholars (cf. Tomaschek in Pauly-Wissowa, *Real-Encyclopädie*, etc., s. v. "Alani," "Alanorsoi" — wahrscheinlich ein Konglomerat von Ἀλανοί und Ἀορσοί, — and "Aorsoi"). That part of the Alans which figures in the history of western Europe during the fifth century soon disappeared without leaving traces of its existence; but the eastern Alans continued for generations "in their old seats in the steppes between the Caucasus, the River Don and the lower Volga, right among the Bulgars, the successors of the Huns; in Tauris, too, we find traces of them in the towns of Sugdæa [Sogdak], and Theodosia (Kafa), about the year 500, had an Alanic name Abdarda (Tomaschek)." Under the Mongols the Alans were termed *A-su* (阿速), and sometimes *A-ssü*. (阿思), the name *A-lan* occurring only once (Bretschneider, "Notices of the Mediaeval Geography," &c., in *Journal, China*

Branch, &c., 1875, p. 261). These two forms may possibly be connected with the ancient names *An-ts'ai* and *Ho-su*.

With this material in hand we are now prepared to analyse what Mr. Kingsmill thinks an "improved" translation; for, with regard to my own, he says: "it is difficult to understand how he has been misled in the translation of a sufficiently simple passage, which refers to the Hiung-nu only incidentally, and to the Hunui not at all."

I here insert Mr. Kingsmill's so-called translation of the Chinese text reproduced above.

"Su(k)te(h) is situated west of the Ts'ung-ling; it was the ancient Im-ts'ai and was also known as Wannasha. It lies close to a great marsh to the north-west of K'ang-ku, and is distant from Tai 16 000 *li*. In former days the Hiung-nu killed its king, and held possession of the country for three generations up to the time of King (H)wui'rsz."

"Formerly the merchants of this country went in numbers to dispose of their wares in the land of Liang: [a party] having entered Kutsang were made prisoners, and at the beginning of the reign Kao-ts'ung [of the Wei] the king of Su(k)te(h) sent a mission requesting their enlargement."

"After this period no further diplomatic intercourse took place."

Before attempting any rectification I have to make a slight correction in the text. The character 巳, *ssî*, should read 已, *i*, "a sign of the past," the two characters being easily confounded (cf. Giles, *Synoptical Studies in Chinese Character*, Nos. 966—968). I have adopted this view through the perusal of a paraphrase furnished in a recent Chinese treatise on the subject, the *Han-si-yü-t'u-k'au* (漢西域圖攷, chap. 6, by Li Kuang-t'ing, 李光廷, of Canton, preface dated 1870), which says: 文成帝太安初匈奴王忽倪得國已三世矣遣使贖之詔聽焉, i. e., "In the beginning of the T'ai-an period of the emperor Wön-ch'öng [in reality 457 A.D. according to *Wei-shu*, chap. 5, p. 5^B] the Hiung-nu prince Hu-ni, [his ancestors] having conquered the country three generations ago (已), sent ambassadors to ransom them [the prisoners], which was granted by imperial edict." It is with this one change in the text that I now add my own translation as first laid before the Munich Academy.

"The country of Suk-tak lies in the west of the Ts'ung-ling. It is the ancient An-ts'ai and is also called Wön-na-sha. It lies on a big sea [ts'ö] in the north-west of K'ang-kü [Sogdiana] and is 16 000 *li* distant from Tai. Since the time when the Hiung-nu killed their king and took possession of their country up to their king Hu-ni three generations have elapsed. The merchants of this country often went to the country of Liang for trade, and at the capture of Ku-tsang they were all made prisoners. In the beginning of the reign of Kau-tsung [452—466 A.D.] the king of Suk-tak sent ambassadors to ask for their ransom, which was granted by cabinet order. From

this time onward they sent no more tribute missions to our court."

It will be seen that Mr. Kingsmill's mistakes are those of interpretation rather than of translation, though he was apparently not satisfied with my rendering 克姑臧 by the German "bei der Eroberung von Ku-tsang." 克, *k'o*, means "to conquer," whether you conquer a city, a country, or your own self. Cf. Giles, No. 6115: 攻城不克, "to attack a city and not conquer it," or "to make an unsuccessful attack upon a city." Mr. Kingsmill's "a party having entered Ku-tsang" is an absolute mistake. The relative clause 詔聽焉 is left untranslated. Apart from the different spelling of names, his mistakes are thus the only points in which Mr. Kingsmill's rendering differs materially from the one he found in my German paper. I, therefore, fail to see what induces him to say: "it is difficult to understand how he has been misled in the *translation* of a sufficiently simple passage."

As regards his interpretation, the one point of his disagreement, the identification of the country called An-ts'ai, is, of course, the pivot on which the entire question turns. Chang K'ien, in his report, merely placed on record what his friends at the Indoscythian court had told him. They were the same informants who supplied him with that interesting word *p'u-t'au* (葡萄), "the grape," = Greek *βότρυς* according to Mr. Kingsmill's own happy idea, and who are known to have used coins with Greek legends as shown in Cunningham's papers on the "Coins of the Indoscythians" in the *Numismatic Chronicle*. Chang K'ien's report on An-ts'ai is in my opinion the oldest example of the introduction into Chinese literature of a piece of classical lore, to wit, the story of the *Μαυώτις λίμνη* with its vast extension to the north and its connection with the *Ωκεανός*, here "the Northern Sea."

According to my view *Hu-ni* (忽倪, *Hut-ngai*) is Hernak, the youngest son of King Attila, who after the death of his father in 454 A. D. withdrew to the extreme parts of Scythia Minor ("Hernac quoque, junior Attilae filius, cum suis in extrema minoris Scythiae sedes delegit." Jordanes, ed. Mommsen, p. 127), which Strabo identifies with the present Crimea, and here according to Tomaschek the Alans had their city of Sogdak (Sudak, Soldaia, &c.) since 212 A. D. All this is, however, immaterial. The main point I wish to contest against Mr. Kingsmill is the

identification of the term An-ts'ai, so sadly misunderstood by him. If once we are convinced that An-ts'ai, A-lan and Suk-tak must be the Alans of western sources, we are justified in drawing the following logical conclusions:

1. Of the Alans we know from European sources that, just about three generations before the embassy sent to China by the state of Suk-tak (former Alans) in 457 A. D., they were conquered by the Huns.

2. Of the Suk-tak nation we learn in the *Wei-shu* that their ancestors, the An-ts'ai (Aorsi, Alans), three generations before their embassy of 457 A. D., were conquered by the Hiung-nu.

3. Since the same nation cannot at the same time be conquered by two different nations, the result is that the Huns and the Hiung-nu are identical. Q. E. D.

Early Chinese notices of East African territories.—By
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THE earliest accounts in Chinese literature of Western territories contain no allusions of any kind that we might interpret as referring to any part of the African Continent. The name Li-kan, or Li-kién, which occurs in Ssi-ma Ts'ien's *Shi-kí* (about 86 B. C.) is there coupled with that of T'iau-chí (Chaldaea), and since in records that date from a few generations later the term is persistently declared to be identical with that of Ta-ts'in, the Roman empire in its eastern provinces, I do not hesitate to look upon it as covering the Roman Orient, possibly including Egypt. This is also the case with the accounts of Ta-ts'in contained in the *Hou-han-shu*,—applying mainly to the first century A. D.,—in which the direction of the silk trade via Antiochia Margiana, Ktesiphon, Hira and, by the periplus of the Arabian peninsula, to the silk-buying factories of the Phenician coast, such as Tyre, Sidon and Berytos, is clearly indicated.¹ Yet no mention of African ports can be traced back earlier than the beginning of the third century A. D., when fresh information, though transmitted unfortunately in sorely disfigured texts, had reached China. I refer to the account of the *Weï-lío*,² where the city of Alexandria is manifestly meant by the name Wu-ch'i-san. I admit that the *Weï-lío* is not very clear in its details regarding the dependencies of Ta-ts'in; but the one passage I refer to leaves but little doubt that Wu-ch'i-san is Alexandria. It says: "At the city of Wu-ch'i-san, you travel by river on board ship one day, then make a round at sea, and after six days'

¹ For texts and translations see my *China and the Roman Orient*, Shanghai, 1885, passim.

² An historical work referring to one of the so-called "Three Kingdoms," the state of Weï (535 to 557 A. D.) and compiled between 239 and 265 A. D. See Chavannes, "Les pays d'occident d'après le *Weï-lío*" in *T'oung-pao*, Série ii, Vol. vi, No. 5, pp. 519, seq.

passage on the great sea, arrive in this country [Tats'in, or its capital Antioch]." This, I hold, describes the journey from Alexandria to Antioch. The first character of the Chinese transcription. *wu* (black), may stand for *o* and *u* in the rendering of Indian sounds;¹ and it also represents the vocalic element of the first syllable (*a*, *o* or *e*) in the several west-Asiatic forms for "ebony," such as Persian *abnus*. in their Chinese equivalent *wu-man-tzi*.² The second character *ch'i* (slow) stands for *di*,³ and the three characters may be said to stand for *adisan* or *odisan*, thus furnishing a still recognizable distortion of the name *Alexandria*. Unfortunately Chinese texts have preserved nothing beyond that name, assuming our interpretation of its transcription is at all correct.

In point of age the next mention in Chinese literature of an African territory is an account applying probably to the beginning of the T'ang dynasty. It occurs in a text devoted to the Ta-shü, i. e., the Arabs of the Khalif empire, in the *T'ang-shu* (chap. 221^B, p. 19), in a passage describing the extent of the Ta-shü dominions, "in the east of which there are the T'u-k'i-shü," i. e. the Türgäsh of the Old-Turkish stone inscriptions, the "south-west being connected with the sea." The Türgäsh being mentioned as the Eastern neighbors of the Ta-shü seems to indicate that the account belongs to the early part of the eighth century. It reads as follows:

"In the south-west [of the Ta-shü, or Arabs] is the sea and in the sea there are the tribes of *Po-pa-li* [in Cantonese and old Chinese *Put-pat-lik*, which I look upon as a transcription of *Barbarik*†]. These do not belong to any country, grow no grain, but live on meat and drink a mixture of milk and cow's blood; they wear no clothes, but cover their body with sheep-

¹ St. Julien, *Méthode pour déchiffrer et transcrire les noms Sanscrits*, etc., Nos. 1313 and 1314.

² See my "Aus der Ethnographie des Tschau Ju-kua" in *Stzb. der philos. Klasse der K. bayer. Akad. d. Wiss.*, 1898, III p. 491, note 3.

³ Julien, op. cit., p. 204 No. 1876; cf. Schlegel, "The Secret of the Chinese Method of Transcribing Foreign Sounds" in *T'oung-pao*, II, Vol. i, p. 249, who says it is pronounced *ti* at Amoy.

⁴ See my paper "Chinese equivalents of the letter R in foreign names" in *Journ. of the China Branch, R. A. S.*, Vol. xxi (1886), p. 219. As there shown, final *t* in old Chinese stands for final *r*; *l* stands for *r*; and *t* before *l* (or *r*) becomes *l* (or *r*) by assimilation see Schlegel in *T'oung-pao*, 1900, p. 109).

skins. Their women are intelligent and graceful. The country produces great quantities of ivory and of the incense *o-mo* [in Cantonese *o-mut* = *omur*, standing for Persian *ambar*, i. e. ambergris].”

“When the traveling merchants of Po-ssī (Persia) wish to go there for trade, they must go in parties of several thousand men, and having offered cloth cuttings and sworn a solemn oath (lit. “a blood oath”) will proceed to trade.”

Another account written generations before the *T'ang-shu*, the work of Óu-yang Siu completed in 1060 A. D., occurs in the *Yu-yang-tsa-tsu* by Tuan Ch'öng-shī, who died in 863 A. D. The transcription here used is identical with that of the *T'ang-shu*, viz: *Po-pa-li* (*Put-pat-lik* = Barbarik). Tuan Ch'öng-shī says (chap. 4, p. 3^B seq.):

“The country of Po-pa-li is in the south-western sea. The people do not know how to grow grain and live on meat only. They are in the habit of sticking needles into the veins of cattle, thus drawing blood, which they drink raw, on having it mixed with milk. They wear no clothes, but cover their loins with sheep-skins. Their women are clean, white and upright. The inhabitants make their own countrymen prisoners, whom they sell to the foreign merchants at prices several times [more than what they would fetch at home]. The country produces only elephants' teeth and *a-mo* [ambergris]. If the Persian merchants wish to go to this county they form parties of several thousand men and make gifts of strips of cloth, and then everyone of them, including the very oldest men and tender youths, have to draw their blood wherewith to swear an oath, before they can dispose of their goods. From olden times they were not subject to any foreign country. In fighting they use elephants' teeth and ribs and the horns of wild oxen made into halberds, and they wear armour and have bows and arrows. They have 200,000 foot soldiers. The Ta-shī (Arabs) make constant raids upon them.”

My identification of these two short accounts, which appear to be derived from a common source earlier than the year 863, is based chiefly on the great similarity which the Chinese transcription bears to the name of Berbera, the city and country on the east coast south of Abyssinia, and on the mention of ivory and ambergris as the chief products. Ambergris was as a matter of fact exported from the coast

of Berbera.¹ The identification is, however, further supported by a later account of the same country in the *Chu-fan-chi* of Chau Ju-kua, who describes it under the name *Pi-pa-lo*, in Cantonese: *Pat-pa-lo*, which is another intelligible transcription of the foreign sound *Barbara*.

Chau ju-kua² describes the country as follows:

"The country of Pi-pa-lo contains four *chôu* (cities), the remaining places being villages rivalling each other in influence and might. The people worship heaven, they do not worship Buddha. The country produces many camels and sheep, and the ordinary food of the people consists of camels' flesh, milk and baked cakes. The country has ambergris [*lung-hiën*, lit. "Dragon's Spittle," the standard word for ambergris, see Giles, No. 4508], big elephants' tusks and big rhinoceros horns. There are elephants' tusks which weigh over a hundred catties and rhinoceros horns of ten catties and more. There is also much putchuck, liquid storax, myrrh, and tortoise-shell of great thickness, for which there is great demand in other countries. Among the products there is further the "camel crane" [*lo-t'o-hau*, i. e., the ostrich]. It measures from the ground to the top of its head six or seven feet. It has wings and can fly, but not to any great height. There is an animal called

¹ See Heyd, *Histoire du commerce du levant au moyen-âge*, ed. Furey Raynaud, Leipzig, 1886, Vol. ii, pp. 571—574. The best quality is found on the coast of Berbera and Zinj (Renaudot, *Ancient accounts of India and China*, London, 1733, p. 64).

² Regarding this author see my papers "Die Länder des Islam nach chinesischen Quellen", *T'oung-pao*, Supplément, Vol. v, Leiden 1894, p. 12 seqq., and "Chau Ju-kua, a new source of mediæval geography" in *Journal, R. A. S.*, 1896, p. 57 seqq. Chau Ju-kua probably wrote at the time of the last Abbaside caliph Mustasim (1242 to 1258 A. D.), since in his description of Bagdad ("Die Länder des Islam," etc., p. 41) he describes its king as a linear descendant of Mohammed the Prophet, and adds that the throne was handed down to his own times through twenty-two generations. If we look upon Cossai as the genealogical head of the several generations the sixth of which saw the prophet himself, the twenty-second was that of the caliph Mustasim. The latest date mentioned in Chau Ju-kua's work is 1210 A. D. In the *Ling-wai-tai-ta* by Ch'ou K'ü-fei, published in 1178, which goes over the same field as the *Chu-fan-chi* and from which about one-third of the matter placed on record by Chau Ju-kua has been copied (see K. Tsuboi, "Cheu Ch'ü-fei's Aufzeichnungen," etc., in *Actes, XIIe Congrès Intern. des Orientalistes. Rome. 1899*, Vol. ii, pp. 69-125), no mention is made of Pi-pa-lo.

tsu-la [in Cantonese: *tso-lap*, a transcription of Arabic *zarafa*, the giraffe]. It resembles a camel in shape, an oxen in size, and it is of a yellow colour. Its front legs are five feet long, its hind legs only three feet. Its head is high up and turns upwards. Its skin is an inch thick. There is also a mule with brown, white and black stripes around its body. These animals wander about the mountain wilds; they are a variety of the camel. The people of the country are great huntsmen and hunt these animals with poisoned arrows."

Mr. W. W. Rockhill, who has collaborated with me in the publication of my translation of Chau Ju-kua's ethnographical sketches, holds that the "four cities" referred to are Berbera, the Malao of the Periplus, and Zeyla, the mart of the Aualites of the Periplus to the west of it; and to the east of Berbera. Mehet or Mait, the Moundon of the Greeks, and Lasgori or Gueselee, the Mosullon of the Greeks. He refers to Ibn Batuta (II, 180), who says of Zeyla that it was an important city, but extremely dirty and bad-smelling on account of the custom of the people of killing camels in the streets. He also notes that the sheep of this country are famous for their fat. At Mukdashau, our Magadoxo or Mugdishu, he says, they killed several hundred camels a day for food. In the first century A. D. the Periplus mentions myrrh, a little frankincense, tin, ivory, tortoise-shell, odoriferous gums and cinnamon among the exports of the Berbera coast.

The Chinese name "camel-crane" is a translation of the Persian name of the ostrich, *shutur-murgh*, meaning "camel-bird" (Bretschneider, *Mediaeval Researches*, London 1888. Vol. i. p. 144. note 392). Ch'ou K'ü-fei refers to the "camel-crane" in similar terms in his account of the Zinj tribes, but he adds that it eats all possible things, even blazing fire or red-hot copper or iron. In other words he justifies its wellknown characteristic, which is conveyed in the popular adage the "stomach of an ostrich." The Chinese author speaking of the camel as the animal from which the "striped mule" is descended would seem strange, if we did not assume that his remark on that point refers to the three animals, the ostrich, the giraffe and the mule. It certainly holds good for the giraffe, which, as Mr. Rockhill points out, was held by some to be a variety of camel, e. g. by Mas'udi (*Prairies d'or*, III 3). Mr. Rockhill has the following note regarding the striped mule of Pi-pa-lo: "This, I suppose,

is the same animal as the *hua-fu-lu*, or "spotted *fu-lu*," of the *Ming-shi*, 326. Bretschneider (*Ancient Chinese and Arabs*, 21 note 7) says that "the *hua fu-lu* is probably the Hippotigris Burchellii, or Douw, the *Tiger-horse* of the ancients, which was brought several times to Rome from Africa. It inhabits the deserts of Eastern Africa, between the equator and the tenth degree of northern latitude, whilst the two other species of this genus of the horse family, the *Zebra* and the *Quagga*, are to be met with only in Southern Africa." Mr. Rockhill refers to Barbosa, who says that the people of Magadoxo "use herbs with their arrows."

There can be but little doubt that the Chinese account of Pi-pa-lo refers to Berbera, and this involves a broad hint as to the identification of another sketch of Chau Ju-kua's which is found in the *Chu-fan-chi* under the designation *Chung-li*. It reads as follows:

"The people of the country of Chung-li go bareheaded and barefooted; they wrap themselves about with cotton stuffs, for they dare not wear jackets, since wearing jackets and turbans is a privilege reserved for the ministers and courtiers of the king. The king lives in a brick house covered with glazed tiles, the people live in huts of palm-leaves thatched with grass. Their daily food consists in baked flour-cakes, sheep's and camel's milk. There are great numbers of cattle, sheep and camels."

"Among the countries of the Ta-shü (Arabs) this is the only one which produces frankincense."

"There are many sorcerers among them, who are able to change themselves into birds, beasts or fish and by these means keep the ignorant people in a state of terror. If some one of them while trading with a foreign ship has a quarrel, the sorcerers cast a charm over the ship, so that it can neither go forward or backward, and they only release the ship when the dispute has been settled. The government has formally forbidden this practice."

"Every year countless numbers of birds of passage alight on the desert parts of the country. When the sun rises they suddenly vanish so that one cannot find a trace of them. The people catch them with nets and eat them; they are remarkably savoury. They are in season till the end of spring, but as

soon as summer comes they disappear to return the following year."

"When one of the people dies and they are about to put him in his coffin, his kinsfolks from near and far come to condole. Each person flourishing a sword in his hand, goes in and asks the mourners the cause of the person's death. 'If he was killed by someone', each one says, 'we will revenge him on the murderer with these swords.' Should the mourners reply that he was not murdered, but came to his end by the will of heaven, they throw away their swords and break into violent wailing."

"Every year there are driven on the coast a great many dead fish measuring as much as twenty *ch'ang* in length, and two *ch'ang* through the body. The people do not eat the flesh of these fish, but cut out their brains, marrow and eyes, from which they get oil, often as much as three hundred *töng*. They mix this oil with lime to caulk their ships, and use it also in lamps. The poor people use the ribs of these fish as rafters, the back-bones as door-leaves and they cut off the vertebrae to make mortars with."

"There is a *shan* [hill, range of hills, island, promontory, or high coast] in this country which forms the boundary of Pi-pa-lo [Berbera]. It is 4,000 *li* in circumference; for the most part it is uninhabited. Dragon's blood is obtained from this *shan* [hill, island, etc.], also aloes, and from the waters, tortoise-shell and ambergris [*lung-hiën*, lit. Dragon's Spittle]."

"It is not known whence ambergris comes; it suddenly appears in lumps of from three to five catties, driven on the shore by the wind. The people of the country make haste to divide it up, lest ships run across it at sea and fish it up."

The essential point in the identification of this country of Chung-li is the mention of a *shan*, which may mean "a range of hills." at the boundary of Pi-pa-lo (Berbera). This port, well-known to the Arabs of the thirteenth century, was indeed separated from the adjoining high plateau by a range of hills, the natural boundary between the territory of Berbera and Somaliland. The extent of the *shan*, in this case "a plateau," being stated to be 4,000 *li*, would point to a large tract of land. I would not lay too much stress on the name Chung-li;

but final *ng* has been used to transcribe final *m* (see Julien, *Méthode*, etc., Nos. 485 and 486: *kang* for Sanscrit *kam* and *gham*); *chung*, middle. is pronounced *tsung* at Shanghai, and *ts* is quite commonly interchanged with initial *s*, e. g. in the title *sengün*, "a general," of the Old-Turkish stone inscriptions, which stands for Chinese *tsiang-kün*. Chung-li may thus possibly be a transcription of the sound *Somali* or *Somal*. Another important characteristic is the remark that this country is the only one among the Ta-shü, or Arab, territories which produces frankincense. This, even if we admit the coast of Hadramaut to have participated in this industry, is a broad hint as to its identification with Somaliland¹.

Mr. Rockhill is of the opinion that the island of Socotra corresponds to Chau Ju-kua's Chung-li, and in support of this view he quotes a number of interesting parallels from mediaeval authors. Thus the aloe, mentioned as one of the products of Chung-li, is referred to by Mas'udi (III. 37), who calls it *socotri* from the name of the island; Marco Polo (II, 398-399, Yule, 2nd ed.) says of its people. "they have a great deal of ambergris." and he relates the almost identical story told by Chau Ju-kua more than a century before him in connection with his Chung-li. He says (p. 399): "And you must know that in this Island there are the best enchanters in the world. It is true that their Archbishop forbids the practise to the best of his ability, but 'tis all to no purpose, for they insist that their forefathers followed it. and so must they also. I will give you a sample of their enchantments. Thus, if a ship be sailing past with a fair wind and a strong, they will raise a contrary wind and compel her to turn back. In fact they make the wind blow as they list and produce great tempests and disasters; and other such sorceries they perform, which

¹ F. A. Flückiger, *Pharmakognosie des Pflanzenreiches*, 3rd. ed., Berlin 1891, p. 45 seqq.: "Die Bäume, welche den Weihrauch liefern, wachsen im Lande der Somalistämme, im äußersten Osten Afrikas, sowie auch auf den jenseits liegenden südostarabischen Küstenstrichen Hadramaut, Schehr und Mahrah." "Der meiste und geschätzteste Weihrauch wird im nord-östlichen Somalilande gesammelt." "In Arabien eingeführter oder dort gesammelter Weihrauch nimmt auch die Namen arabischer Landschaften an, z. B. Schehr, Morbat, Dhofar." In a special chapter on frankincense Chau Ju-kua mentions just these three places as producers of the drug.

it will be better to say nothing about in our Book." Chau Ju-kua is less discreet, when he informs us that the sorcerers of Chung-li changed themselves into birds or fish, in order to terrorize the population. According to him "the Government has forbidden such practices." This applies in Socotra to the "Archbishop,"—in reality as late as 1281 a bishop ordained by the Nestorian patriarch of Bagdad (Assemani, *Bibl. Orient.* IV, p. 780). Rockhill quotes two other stories of sorcerers, one from Purchas' Pilgrims (IX, 254), who quotes Friar Joanno dos Santos (A. D. 1597) as describing quite a similar trick practised by a great sorcerer on the isle of Zanzibar, and another, mentioned by Ibn Batuta (IV, 227), of sorcerers on an island in the eastern part of the Indian Ocean, who "raised storms by enchantment when vessels did not pay the customary tribute."

Taking into account the parallels to which Mr. Rockhill has drawn attention, I feel tempted to accept his suggestion as regards Socotra. The translation of *shan* by "a rocky island" is certainly unobjectionable, and since nearly all that can be shown to apply to Socotra from western sources occurs in the text after the words "there is a *shan* in this country," etc., the concluding part of the chapter may be regarded as an appendix to the account of Chung-li describing this outlying island of Socotra. The *shan* being stated to measure "four thousand *li* in circumference" fairly corresponds to the ideas current among western geographers of the period, if we look upon the *li* not as the Chinese *li*, but as the thirtieth part of a parasang, or a stadium, in which sense I have shown it is to be taken in the identifications of several western Asiatic itineraries (see my *China and the Roman Orient*, pp. 222-225). Four thousand *li* would thus be equal to 133 parasangs. This may be an exaggerated estimate of the size of the island, but scarcely more so than the statements of Yakut (Wüstenfeld III p. 102, quoting al Hamadani) and Abulfeda (*Geogr. d'A.*, ed. Reinaud and de Slane, Paris 1840, p. 371,—kindly furnished to me by Prof. Gottheil),—who state that the length of Socotra alone was "eighty parasangs."

This part of the coast of Africa was certainly well-known and much frequented by Arab and Persian traders during the thirteenth century. Chau Ju-kua is well acquainted with its products such as frankincense, aloe, dragon's blood

and ambergris, and since all these were staple articles of the Chinese market, we may infer that direct commerce was carried on through the mediation of Arab skippers plying between Ts'üan-ch'ou-fu (Zaitun) and Canton in the Far East and the several ports *en route*, including those of Africa, and their Arabian homes. We need not be astonished, therefore, to find that remnants of the mediaeval intercourse between the coasts of China and Eastern Africa have actually been discovered. In April 1898 two small collections of Chinese coins were sent to me for identification, one by Dr. F. L. Stuhlmann, now at the head of the biological and agricultural Institute at Amani (East Africa), the other by Mr. Justus Strandes, both well-known African travellers. Dr. Stuhlmann wrote me that his collection of eight coins had been excavated in the neighbourhood of Mugdishu on the Somali coast together with a great many broken pieces of Chinese celadon porcelain, vitreous paste and Arabic coins; Mr. Strandes, who had purchased his collection of seven coins at the same place, wrote in similar terms. Both collections are now in the "Museum für Völkerkunde" of Berlin. The several coins were unfortunately in a bad state of preservation, but they were without exception of the Chinese type, i. e. round with a square hole and of bronze.

Those coins the legends of which I was able to identify are all dated from before the beginning of the thirteenth century, the eleventh and twelfth centuries being chiefly represented. I am, therefore, inclined to ascribe them to the very period covered by Chau Ju-kua's account of Chung-li, which, owing to the fact that the *Ling-wai-tai-ta* of 1178 contains no mention of these territories, must be placed between this date and Chau Ju-kua's time, i. e. about 1242 A. D. Chinese junks have visited Mugdishu in 1430 (see my *Ancient Porcelain*, Shanghai, 1888. p. 62 and note 155), but since no coins of the Ming Dynasty could be traced in the two small collections, unless they were among the few hopelessly disfigured unidentified specimens, I conclude that these unique traces of Chinese intercourse so far discovered had nothing to do with that later period.

Of the east coast south of Somaliland we possess short accounts of an island called *Ts'öng-pu* and of a country *K'un-lun-tsöng-ki*, both by Chau Ju-kua.

Ts'öng-pa, in Cantonese *Ts'ang-pat*, may be a transcription of *Zanguebar*, or *Zanzibar*.

Chau Ju-kua's text runs as follows:

"The *Ts'öng-pa* country is an island of the sea south of *Hu-ch'a-la* [Guzerat]. On the west it borders on a great mountain."

"The inhabitants are of *Ta-shi* stock and follow the religion of the *Ta-shi*. They wrap themselves in blue foreign cotton stuffs and wear red leather shoes. Their daily food consists of meal, baked cakes and mutton."

"There are many villages and wooded hills, and lines of hills rising one above the other."

"The climate is warm, and there is no cold season. The products of the land include elephants' tusks, native gold, or gold bullion, ambergris and yellow sandalwood."

"Every year *Hu-ch'a-la* [Guzerat] and the *Ta-shi* settlements along the sea-coast send ships to trade white cotton cloth, porcelain, copper and red *ki-pei* [cotton] in this country."

The chief difficulty in the explanation of this account is the mention of sandalwood among the products of the country, since it is not likely that Indian, Timorese, or far-eastern varieties were brought to this out-of-the-way part of the Indian Ocean as a market. I do not know whether the dye made of the rock-moss, or orchil, of Zanzibar may possibly be confounded with some dye made of sandalwood. The mistake might perhaps be accounted for in this way.

On the other hand we have unmistakeable evidence of the importation of Chinese porcelain. The late Dr. W. S. Bushell, in a review of my book on "Ancient Porcelain" (*North-China Daily News*, May 9th, 1888) has the following remarks on this point:

"Arabian writers tell us of fleets of large Chinese junks in the Persian Gulf in the eighth century, and the return voyage of Marco Polo in the suite of a Mongol Princess from Zayton to Hormuz is well-known. The "*Chu Fan-chi*," a book on foreign countries by Chao Ju-kua, an author of the Sung Dynasty, was published a century before the time of Marco Polo. Dr. Hirth quotes this to trace the export of porcelain even as far as the coast of Zanzibar, the great African mart of ivory and ambergris, which is described

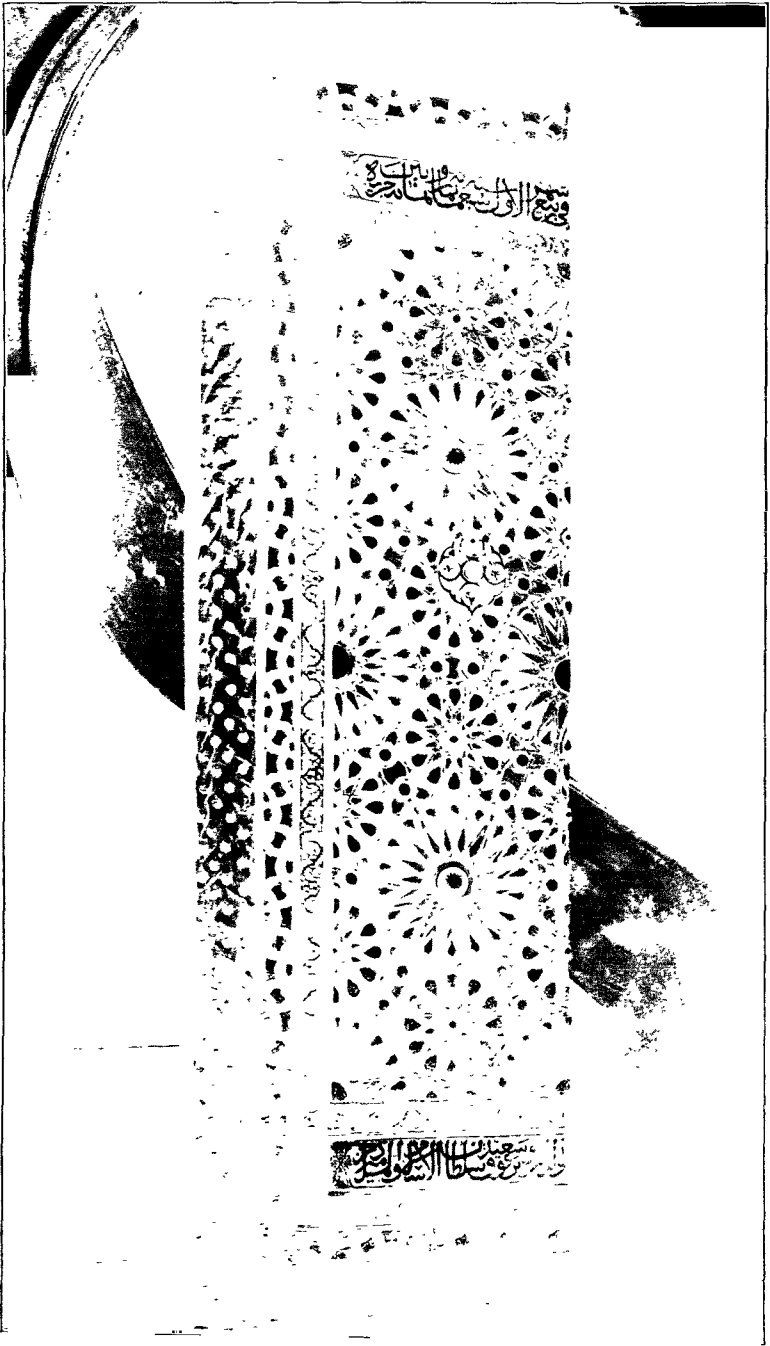
under the name of Ts'eng-p'o. I may add that Sir John Kirk during his residence as Consul-General at Zanzibar, made a collection of ancient Chinese celadon porcelain, which he took to the British Museum last year. Some of it was dug up, I believe from ruins, mixed with Chinese cash of the Sung Dynasty, a striking confirmation of the Chinese writer, who was Inspector of Foreign Trade and Shipping in Fuhkien Province."

A Door from the Madrasah of Barkūk.—By RICHARD J. H. GOTTHEIL, Professor in Columbia University, New York City.

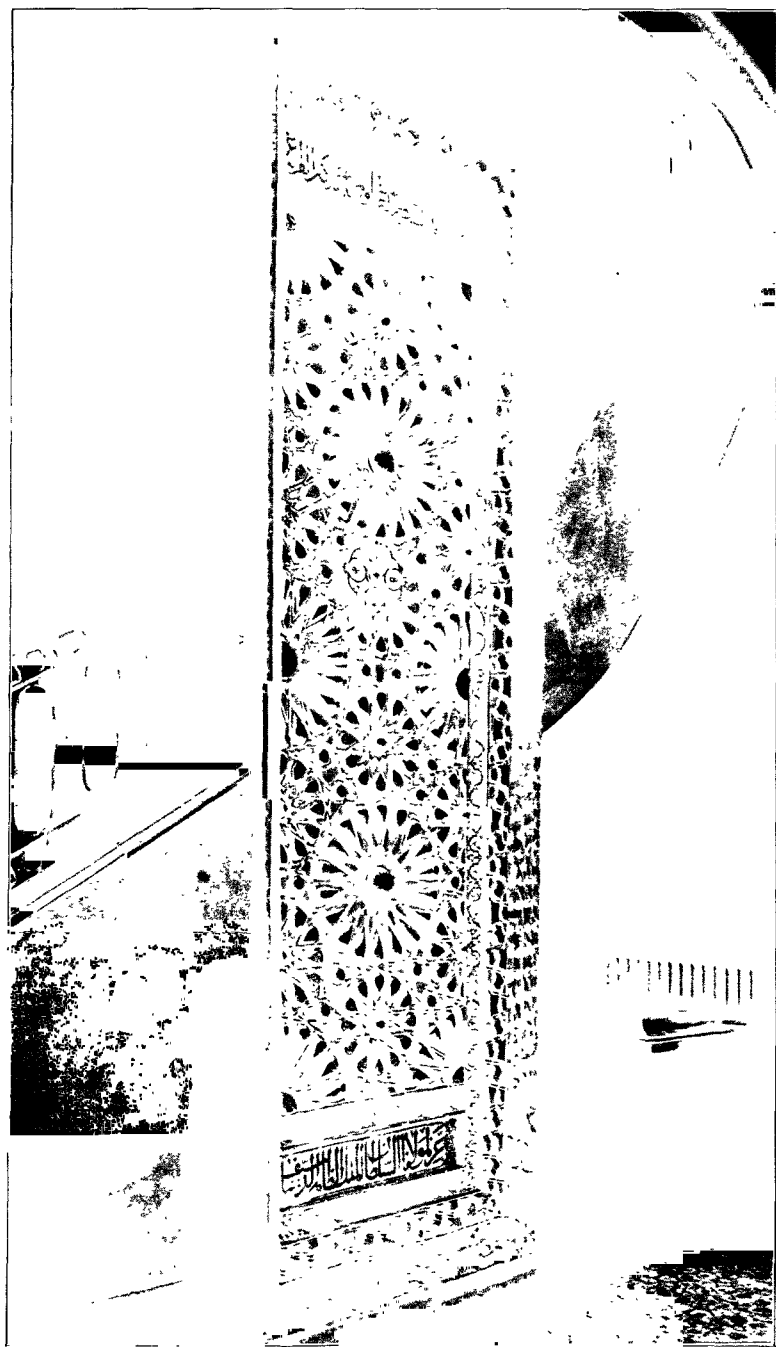
THE doors, of which a separate photograph for each wing is here given, are to-day placed in the entrance to the Hispanic Museum in New York City. They were bought in Cairo some years ago by Mr. Archer Huntington and belong to the finest period of Egypto-Muhammedan metal work. The doors are in a perfect condition; and though it looks as if in one or two places they had been restored, the restoration has been so cleverly done that it is hardly apparent. Each wing is made of wood completely covered with bronze. Along the sides the metal is very thin and artistically kept in place by nails forming diminutive rosettes. The rest of the wood is covered with thick pieces of metal so cut as to form polygonal rosettes the angles of which are filled up or embossed so that the rosettes stand out in relief. All of the embossed work, again, is damaskeened with silver and part of the unembossed surface is damaskeened with gold. Each leaf has a finely chiseled knocker placed about two-thirds of the way up. The inscription commences at the lower end of the right-hand leaf and is of silver damaskeened in plaques of bronze. It is in the late Naskhi form of the Mameluke period, and reads as follows: عز مولانا السلطان الملك الظاهر سيف الدنيا والدين ابو سعيد برقوق سلطان الاسلام والمسلمين دُخر الايتام والمساكين نُصرة الغُرّات والمجاهدين وكان الفراغ في شهر ربيع الاول سنة سبعماية وثمان وثمانين هجرية.

"Glory to our master the Sultan al-Malik al-Zāhir Saif al-dunya wal-dīn Abu Sa'īd Barkūk, Sultan of Islām and the Muhammedans, the one who is munificent to orphans and to the poor, the help of warriors and of those who fight for the faith. It was finished in the month Rabī' al-Awwal in the year seven hundred and eighty eight of the Hijra."

On the bosses of the four central rosettes is the name برقوق. In the centre of the rosettes in the middle which are



A door from



the Madrasah of Barḳūk.

divided into halves there are also inscriptions which I have not been able to decipher satisfactorily.

It is quite evident that we have here a door from a building put up by the Burjī Mamluke Zāhir Saif al-Dīn Barḳūk who came to the throne in 784 A. H. (= 1382 A. D.). The doors were finished in April of the year 1386. It is also evident that the doors come from the Barḳūkiyyah¹ or, as it is called, the Zāhiriyyah al-Jadīdah—the Madrasah built by Barḳūk in the Suk al-Nahḥāsīn, which served also as a convent for the Sufis. Van Berchem has given in his *Corpus* a number of other inscriptions similar to the one on these doors. The Madrasah has been often restored; within recent years by Herz Bey.

The inscription, however, contains one or two difficulties which it is so hard surmount. I do not refer to the form *ابو* for *أبي*; that is not at all uncommon; but to the manner in which the date is expressed. The hundreds placed first is not an impossible construction, as compound numbers in Arabic can be expressed either in an ascending or a descending scale. But here the units are placed between the hundred and the decade, which will not do at all. Indeed, the whole order of the numerals is unusual in inscriptions. In many hundreds of inscriptions coming from Egypt, Syria and Mesopotamia I have not found one case in which the order of the numerals is other than that of the ascending scale.

In addition to this, the last word of the inscription *هجرية* is uncommon. The expressions used are: *للهجرة* and *للهجرة* *المحمدية*. *من الهجرة النبوية*, *من الهجرة النبوية* *المحمدية*. The only other case in which I have found it used is in the inscription of Aḥmad ibn Muẓaffar al-dīn ʿUthmān ibn Mankūrus on the fortress of Muhēlbah in Northern Syria.² The want of space may have occasioned the use of the shortened form in our inscription.

It would be hazardous to pronounce a judgment upon the genuineness of this door. But, it is surprising that Van Berchem in his *Corpus* of the Arabic inscriptions at Cairo³ mentions

¹ See Van Berchem, *Corpus Inscriptionum Arabicarum*, pp. 297 et seq.; Baedeker, *Egypte*, (1903), p. 64; *Manuel d'art Musulman*. I (par H. Saladin) pp. 140 et seq.; II (par G. Migeon), pp. 196, 209, 232.

² Van Berchem, *Inscriptions Arabes de Syrie* (Le Caire 1897), p. 86.

³ *loc. cit.* p. 304.

the fact that in the year 1893 a dealer, Hatoun, in the Mouski of that city, had for sale a door very similar (to judge from the description given by Van Berchem) to the one at present under discussion. The inscription is exactly similar to the one I have given, only with the word *هجورية* omitted. Van Berchem could not find any reason for the slightest suspicion and pronounced the door to be genuine; but Herz Bey pronounced it to be a piece of modern work manufactured in the selfsame year 1893, and his judgment was supported by others on the spot.¹

To add to the difficulty, Migeon, in his *Manuel d'art Musulman*, II, p. 196, gives a reproduction of a mosque door which in every artistic particular is an exact copy of the one under discussion, with the exception of the outer border which has less rows of nails than has the door in the Hispanic Museum. The inscription, however, is different and is similar both in the upper and lower bands:

عز لمولانا السلطان المجاهد محمد الناظر سلطان الاسلام والمسلمين

"Glory to our master the Sultan, the fighter for the faith, Muhammad al-Nāẓir Sultan of Islām and the Muhammedans," i. e. Nāsir al-Dīn Muhammad ibn Ḳalā'un, who ruled several times in Egypt towards the end of the 13th century. Migeon states that these doors are in the Arabic Museum in Cairo; but I can not find them mentioned in the latest edition of the Catalogue of that Museum.²

¹ *loc. cit.* p. 770.

² *Catalogue raisonné des monuments exposés dans le Musée Nationale de l'art Arabe* . . . par Herz Bey (2nd Ed.). Le Caire 1906. pp. 173, 177, 212.

Postscript (August 18. 1908). In a letter, dated July 15. 1909, Herz Bey confirms my suspicions in regard to the genuineness of the doors. He writes that they were made in the year 1892 by an Arab workman named 'Alī al-Shiyashī (علي الشيشي) for the Cairo Street of the Midway Plaisance in the Chicago World's Fair. 'Alī, however, could not come to an understanding with the managers of the "Street" in regard to the price, and the doors remained in Cairo, where they passed into the possession of the dealer Hatoun.

A Hymn to Bêl (Tablet 29623, CT. XV, Plates 12 and 13).—By FREDERICK A. VANDERBURGH, Ph. D., Columbia University, New York City.

THE following is one of the collection of twelve unilingual non-Semitic Babylonian hymns copied from tablets in the British Museum by Mr. L. W. King, M. A., Assistant in the Department of Egyptian and Assyrian Antiquities, and published in "Cuneiform Texts from Babylonian Tablets in the British Museum by Order of the Trustees," Volume XV.

Dr. J. Dyneley Prince, Professor of Semitic Languages in Columbia University, and myself have now translated the whole collection. Professor Prince has published three: viz., "To the Goddess Bau;" "To the God Nergal," and "To the Goddess Girgilu." "I have published in my "Sumerian Hymns" four: "To Bêl;" "To Sin;" "To Adad;" and "To Tammuz." I have another "To Bêl" that is expected to appear in the Journal of the American Oriental Society, and still another "To Bêl" is in preparation. The one of which a transliteration, translation and commentary are given in this Article is the fourth and last one "To Bêl" in the collection.

I am not aware that the hymn treated in this Article has ever been translated before or published.

This hymn in which Bêl is addressed in both the Eme-Ku and the Eme-Sal dialects of the non-Semitic literature of Babylonia must be recognized as very ancient. It is evident that Bêl is invoked here as the ruler of the nations in the same spirit in which he is honored in the inscriptions of the kings of the predynastic and early dynastic periods from the time of En-šag-kušanna until the time of Hammurabi. When the hymn was composed, Nippur, Ur and Larsa, the three cities therein mentioned, were flourishing towns.

Our copy of the hymn, however, is not Old-Babylonian, but New-Babylonian. While the composition is very old, the copy is not. For example, GIR or ELIM, MA, LUL. TA. KAN; BU are Old-Babylonian, but the following signs are New-

Babylonian: BIT, ZI. UN. AN, KIT, GA, DA, MI, TUR, IM, EN, NE, DAMAL, AZAG. KA, MAH, ŠIŠ, BI.

This hymn is apparently the most beautiful and interesting one of the four addressed to Bêl in CT. XV, 7-30. The conception of the subject is very picturesque and the lyrical quality characteristic of the religious literature of the Semitic race is fully as apparent here as in other Babylonian hymns. The thought is wrought into rhythmic stichs for recitation in divine service with some traces of strophic division. The essential attributes of the god and the power he exercises over the lands are dwelt upon, but, above all, attention seems to be focused on the heroic administration of Bêl in the conquest of an insubordinate city.

As to thought and form of statement, the hymn is clearly divided into three parts. Lines one to nine contain descriptive epithets of Bêl's divine attributes. (1) Bêl is known as the 'mighty one,' expressed by the Assyrian *kabtu*, synonymous with either *gûr* or *elim*, and suggestive of the Scriptural idea 'almighty.' (2) Bêl was 'lord of the lands;' this *unun* corresponds to the Semitic *bêlu*, 'proprietor' of the lands: a 'lord' was an 'owner.' As Anu was the heaven god, Sin the moon god, Šamaš the sun god, Istar the star deity, so Bêl was the earth god. (3) Bêl was a 'righteous' god, being called 'lord of righteous command.' (4) Bêl was a god of 'providence,' being 'father of the word of destiny.' (5) Bêl's particular care reached over the Babylonians: he was 'shepherd of the black-headed.' (6) Bêl was a god of vengeance, a 'wild bull executing judgment on the enemy.' (7) Bêl was omniscient, 'the all-seeing one.'

Lines ten to twenty particularize the location of Bêl's dominion. The seat of his cult was Nippur, but he was honored also in Ur and Larsa. His temple, E-kur, was located in Nippur, whither kings and princes from distant lands came to do him homage.

In lines one to twenty it may be noticed that with a single exception a characteristic praise-refrain is observed in every stich.

At the end of line twenty there is a decided change in style. Lines twenty-one to thirty-four delineate the experiences of a city in siege under the surveillance of Bêl. Water and corn supplies are cut off. Scenes of famine are sketched and also

of conflagration and pillage. As the result the fear of Bêl extends over the lands.

Transliteration and Translation.

Obverse.

1. *nî-tuk gûr(KIL) šâ(Û) eri-zu igi(ŠI)-ê(BIT)* — — — —
Thou art the mighty one of old; thy desirable city — —
2. *elim-ma nî-tuk gûr(KIL) šâ(Û) eri-zu igi(ŠI)-ê(BIT)* —
O king, thou art the mighty one of old; thy desirable
city — — — — — — — — — — — — — — — —
3. *û-mu-un kûr-kûr-ra-ge(KIT) gûr(KIL) šâ(Û) eri-* — —
O lord of the lands, the mighty one of old; city — —
4. *û-mu-un sag-ga zi-da gûr(KIL) šâ(Û) eri-* — — — —
O lord, head of life, the mighty one of old; city — — — —
5. *dimmer mu-ul-lil(KIT) a-a ï(KA) na-âm-mă(MAL)* — *ne*
O Bêl, father of the word of destiny; — — — — — — — —
6. *sîba sag gîg(MI)-ga gûr(KIL) šâ(Û) eri-* — — — — — —
O shepherd of the black-headed, the mighty one of old;
city — — — — — — — — — — — — — — — —
7. *î-de gaba nî(IM)-te-na gûr(KIL) šâ(Û) eri-* — — — —
O thou who art by thyself the all-seeing one, the mighty
one of old; city — — — — — — — — — — — — — —
8. *ama erim(SAB)-na di-di gûr(KIL) šâ(Û) eri-* — — — —
O thou wild bull executing judgment on the enemy, the
mighty one of old; city — — — — — — — — — — — — — —
9. *û-lul-la ma-ma gûr(KIL) šâ(Û) eri-* — — — — — —
O thou powerful one of the countries, the mighty one of
old; city — — — — — — — — — — — — — — — —
10. *eri-zu en-lil(KIT)-ki-zu gûr(KIL) šâ(Û)* — — — — — —
In thy city thy Nippur, the mighty one of old; — — — —
11. *še-ib ê(BIT)-kûr-ra-ta gûr(KIL) šâ(Û)* — — — — — —
In the foundation of E-kur, the mighty one of old; — — — —
12. *ki dan.al ki gal-ta gûr(KIL) šâ(Û)* — — — — — —
In the broad land the great land, the mighty one of old; — —
13. *dû(TUL) agaz ki azug-ta gûr(KIL) šâ(Û)* — — — — — —
In the glorious dwelling of the glorious land, the mighty
one of old; — — — — — — — — — — — — — — — —

14. šâ(LĪB)-ê(BIT) dīm-ma-ta gūr(KIL) šâ(Û) — — — —
In the midst of the house of the king, the mighty one
of old; — — — — — — — — — — — — — — — —
15. ê(BIT) kî mah-ta gūr(KIL) šâ(Û) — — — — — — — —
In the house of the high gate, the mighty one of old; —
16. ê(BIT) gâ(MAL) nun mah-ta gūr(KIL) šâ(Û) — — ka
In the firm house of the exalted prince, the mighty one
of old; — — — — — — — — — — — — — — — —
17. ma-mu šu-a-ta gūr(KIL) šâ(Û) — — — — — — — — ka
In the entrance of my land, the mighty one of old; — —
18. ma ê(BIT)-gal mah-ta gūr(KIL) šâ(Û) — — — — — ka
In the land of the exalted temple, the mighty one of
old; — — — — — — — — — — — — — — — —
19. še-ib ūru-unu-ki-ma-ta gūr(KIL) šâ(Û) eri- — — ne ka
In the foundation of Ur, the mighty one of old; — — —
20. še-ib utu-unu-ki-ma-ta gūr(KIL) šâ(Û) eri-zu — — ne ka
In the foundation of Larsa, the mighty one of old; — —
21. eri a-dug(KA)-ga a-gi-a-zu
A city striveth; it is turned away by thee.
22. a-dug(KA)-ga a-ta gâr(ŠA)-ra-zu
It striveth; it is shut off from water by thee.
23. eri še-kul(TAR)-da ki-lul-a-zu
It is a city with corn cut off; it is blocked by thee.

Reverse.

24. [nu]-nag nu-nag-a ud-zal(NI)-zal(NI)-la dî(RI)
They drink not, they drink not; the morning dawneth.
25. dam tur-ra-ge(KIT) dam-mu mu-ni-ib-bi
To the young spouse, one crieth "My spouse."
26. dû(TUR) tur-ra-ge(KIT) dû(TUR)-mu mu-ni-ib-bi
To the little child, one crieth "My child."
27. ki-el-e šes-mu mu-ni-ib-bi
The maid crieth "My brother."
28. eri-ta damal gan-e dû(TUR)-mu mu-ni-ib-bi
In the city the bountiful mother crieth "My child."
29. dû(TUR) bân(TUR)-da a-a-mu mu-ni-ib-bi
To the strong man one crieth "My father."

30. *tur-e al-è*(UD. DU) *maḥ-e al-è*(UD. DU)
The small (flames) break out, the great (flames) break out.
31. *e-sir*(BU) *e-gub*(DU)-*ba mu-un-sar-ri-ni*(NIN)
On the street they stand, they cry.
32. *sal-la-bi ur-e am*(A. AN)-*da-ab-lá*
Their booty men bear away.
33. *sìg*(PA) *gan-bi mu bar-ri am*(A. AN)-*da-ab-lá*
The staff of their youth the king of judgment beareth away.
34. *ki e-ne ki-zu-ge*(KIT) *ba-e-ni*(IM)
Those lands are in fear of thy land.
ušu(EŠ) *za êr*(A. ŠI) *lim(b)*(LUL)-*ma dingir en-lil*(KIT)-*a-kam*
34 (lines) Penitential hymn to Bêl.

Commentary.

1. *ni-tuk*: *ni*, a common pronominal verbal prefix of the second person; *tuk* means primarily 'seize,' 'have,' and then in an intransitive relation, 'be present,' 'be.'

gùr(KIL): the question might arise whether the sign is not IZ; it occurs nineteen times in the tablet; the wedges seem to make an enclosure of an equilateral rectangle, as is always intended in KIL, but usually in the sign IZ, the horizontal dimension is greater than the vertical. For examples of IZ in this collection of hymns in CT. XV, see Plates 10 : 24; 11 : 13, 14, 15 and 16; 14 : 35; 16 : 6; and 19 : 25. For examples of KIL, see Plates 7 : 27; 9 : 2 and 3; and 19 : 24, 27 and 28. Also cf. sign-lists of Delitzsch in *Assyrische Lese-stücke*, vierte Auflage, and Amiaud in *Tableau Comparé des Écritures Babylonienne et Assyrienne Archaïques et Modernes*, *gùr* equals *kabtu*. If the sign is IZ, the value is *geš*, equal to *idlu*, 'hero.'

Šâ(Û) equals *labîru*, 'old;,' see Prince's Hymn to Nergal in JAOS, XXVIII, pp. 168-182. Brummer, in *Die Sumerischen Verbal-Afformative nach den ältesten Keilinschriften*, explains Û as a compound sign, equal to ŠI, 'eye,' plus LU, 'take away;,' giving the meaning 'take away the eye,' 'become old,' 'elderly.'

eri or the Eme-Ku *ûru* equals *alu*, 'city,' and *zu* is the common pronominal suffix 'thy,' phonetically cognate with the personal pronoun *za-e*; the value *eri* for ER occurs in the ideogram for *eridu*; see Creation Legend, Tablet 82-5-22, 1048, CT. XIII, 35-38, Obverse, line 8, *eridu* (ERI. 𒂗) *ul ba-ni*.

igi(ŠI)-ê(BIT): the erasure of the last end of this line precludes satisfactory explanation of this word, although ŠI. BIT is sometimes equal to *amâru*, 'see,' *igi* commonly having the meaning 'eye' and ê the meaning 'house,' i. e. 'eye-structure.'

2. *elim-ma*: by the process of gunction, several signs have developed from GIR; for example, KISŠ by the addition of MIN, ANŠU by the addition of PA, HUS by the addition of 𒂗I, AZ by the addition of UD, UK by the addition of ZA, and ELIM, or more exactly ALIM, by the addition of ÊR(A. ŠI). The sign in the text is somewhat indistinct; it appears to be GIR, but MA as a phonetic complement would indicate that the sign was ELIM. GIR equals 'power'. ELIM means 'lord,' 'king.'

3. *û-mu-un*, phonetic representation, is sometimes ideographically represented by the corner wedge 𒄩; the value *umun* may be shortened to *u* or *mun* or *un*, or it can be lengthened to *û-mu-un-e*, having the defining vowel *e*, as in Plate 10 : 3 where Bêl is spoken of, and Plate 17 : 2 and 3 where Sin is spoken of. *umun* equals 'lord' (*u*) plus 'being' (*mun*).

kûr, 'mountain,' 'land,' is probably etymologically connected with *ku*, *ašâbu*, *šubtu*. 'dwell,' 'dwelling': *ku* being possibly a shortened form of *kûr*. *ge*(KIT) is a common sign of genitive relation: 'lord of lands.'

4. *sag-ga*: the sign is quite clearly SAG, but perhaps the clause is the same as the last clause in Plate 10 : 4, if so, the reading should be, 'lord of righteous command,' with *dug*(KA)-*ga* instead of *sag-ga*, *dug-ga* being equal to *kibîtu*, 'command,' and *zi(d)-da* being equal to *kênu*, 'righteous,' see Vanderburgh. Sumerian Hymns, p. 27.

5. *mu-ul-lil*(KIT) is Eme-Sal for *en-lil*(*el-lil*), *mul*(*wul*) being dialectically equal to *en*(*el*). The meaning of *lil* is somewhat confused by the word's having been wrongly connected with *zakîku*, 'wind,' it more properly means 'structure,' 'fulness.'

a-a is the common word for 'father,' how it comes to mean 'father' is somewhat obscure; it may be shortened from *ad-da*, where *ad* equals *abu*. *a* primarily means 'water,' but also means 'father,' perhaps as 'seed-producer.' *a-a* is probably a phonetically lengthened *a* equal to *abu*.

ì(KA): the meaning of KA here is not distinctly indicated. KA is a sign which has many meanings, but the one sometimes represented by ì gives tolerably good sense here. *na-àm-mă*(MAL) is phonetic and is a lengthened form for *nam* which equals *šimtu*.

6. *siba* means 'he who grasps the staff,' and is the common word for 'shepherd,' though LAH. BA sometimes stands for 'shepherd.' *sag-gìg*(MI)-*ga*, equal to *šalmât kakladi*, is an often repeated designation for Babylonians, as subjects of Bêl or some other ruler.

7. *i-de* is Eme-Sal for *igi*(ŠI), equal to *inu*, 'eye.' *gaba* equals *pitû*, 'open.' *nì*(IM)-*te* equals *ramânu*, 'self,' although the original meaning is 'fear,' yet when applied to the one who causes fear it comes to mean 'self.' *nì-te* literally means 'fear a fear.' *i-de gaba nì-te-na* then means 'open eyed by thyself,' *na* being a pronominal suffix equal to *-ka*.

8. *ama*: AMMU originally represented the 'bull of the mountain,' while the same form ungunated by the addition of the sign KÚR, 'mountain,' being a picture of the bull's head. represented the domestic bull. *erim*(ŠAB)-*na* equals 'warrior,' 'soldier,' 'enemy,' and *di*, 'to judge.' The whole expression *ama erim-na di-di* occurs in Plate 10 : 7.

9. *ù-lul-la*: *ù* is sometimes a nominal prefix, having a determinative force, like *a* in *a-lig*; see Plate 19 : 2 and 3, also Plate 20 : 4, 5, 6, 7, 8 and 9; see MSL. p. XVII, and *ù-tu*, Br. 1070. LUL sometimes equals *dannu*, see Br. 7268 and 7276. Its original form was that of a gunated GIR; in the copy of Tablet 13963, Plate 10 : 8, it has been mistaken for GIR, as this line clearly shows.

ma-ma: MA is not so common an ideogram as KÚR; MA means 'earth,' KÚR means 'mountain.' MA. DA, 'strong land,' seems to be original and the Assyrian *mātu* a loan-word. Besides MA and KÚR there seem to be two other Sumerian ideograms for *mātu*, namely KALAM and sometimes KI.

10. *en-lil*(KIT)-*ki*, 'land of Bêl,' common ideogram for 'Nippur.'

11. *še-ib* equals *šeb*, the Eme-Sal value for GAR which is equal to the Eme-Ku *šeg* no doubt; the Assyrian equivalent is *libittu*, 'layers of brick,' from *labānu*. *ta* equals 'in,' meaning 'source,' as is shown by the expression *kúr babbar è-ta kúr babbar šu-šù*, 'from the land of the rising sun to the land of the setting sun.'

12. *damal*, Eme-Sal for *dagal*, equals *rapšu*, 'broad,' and *gal* equals *rabû*.

13. *dû*: TUL meaning 'to cover,' readily yields the meaning *šubtu*, 'dwelling,' with the value, however, of *dû*; *dû-azag* sometimes has the meaning of *šadû*, 'mountain.'

14. *ša*(LİB) is a proposition or rather noun in the construct state followed by the genitive *ê*(BIT). *dīm-ma* equals *šarru*, 'king.' Br. 4254.

15. *ká* equals *bābu*, 'gate,' while *ka* equals *pû*, 'mouth.' *ká* must be pronounced differently from *ka*. KÁ represented 'entrance to a house,' but KAGU first represented 'head,' then 'mouth.' The meaning 'high' for *maḥ* is derived from that of being 'important' or 'great.'

16. *gà*(MAL) equals *šakānu*, 'establish,' and *nun* equals *rubû*, 'prince.' Br. 2629.

17. *šu-a-ta* means 'in the entrance,' or 'when he enters,' *šu* being equal to *erēbu*.

18. *ê*(BIT)-*gal*, 'great house,' the Sumerian form from which the Assyrian *êkallu*, 'temple,' is derived.

19. *ûru*(ŠIŠ)-*unu-ki-ma*, Ur, apparently signifies the 'protected dwelling place,' *uru* being equivalent to *našāru*. But it is to be noticed that the ideogram for Ur sometimes takes the form *uru-ab-ki*; see Code of Hammurabi, 2 : 17. It also takes the form *uru-um-ki-ma* in which *ma* becomes a true phonetic complement; see Hilprecht's Old Babylonian Inscriptions chiefly from Nippur, Nos. 14, 15, 18, 19 and others. Ur was chiefly famous as being the seat of the cult of Nannar whose temple was called E-gišširgal.

20. *utu-unu-ki-ma*, the ideogram for Larsa which was one of the old seats of the cult of Šamaš, means the 'dwelling place of light.'

21. *dug*(KA) is a verb with the meaning here of *maḥāṣu*; the primary significance of the sign suggests that the meaning might originate from a contention of words. *zu* as a suffix here is subjective, considered as a relative pronoun the antecedent does not appear in the line.

22. *a-tu* means 'from water.' *gār*(ŠA) equals *esêru*.

23. *še-kud*(TAR)-*da* means 'with corn cut off,' *kud* being equal to *parâsu*. and *ki-lal* equals *sanâḫu*, 'blockade,' literally 'raise up the ground.'

24. *-nag*: no doubt the text should be *nu-nag*. *nu-nag-a*: *a* is a vowel of prolongation; 'to drink no water' would be a *nu-nag*. *ud-zul*(NI)-*la* means *šêru*, 'morning,' *ud* is equal to 'light,' and *zal* to 'shine.' while *la* is a phonetic complement. *dî*(RI) equals *nabātu*.

25. *dam* equals *hâiru*, 'spouse.' *tur-ra* equals *ṣilru*, 'young.' *ge*(KIT) is sometimes represented by *ana* although always secondarily. It is more commonly the sign of the genitive. *mu-ni-ib-bi* equals 'one speaketh to him,' *ni-ib* being an infix that represents a dative, the *ni* representing the 'him' and the *ib* the 'to'. *bi* equals *ḫibû*, 'speak.'

26. The sign DUMU as equal to *mâru* or *mârtu* has the value *dû*.

27. *ki-el-e* equals *ardatu*, 'maid.' *ki* being a prefix of determination, while *el* means 'shining one.' *šes* equals *aḫu*; there is doubt whether the archaic form meant 'protection' or 'other one.'

28. *damal* equals *ummu*, 'mother.' *gan-e* equals *alidu* or *alidtu*.

29. *dû*(TUR) may equal *amêlu* and TUR with DA equals *bân-da*, 'strong.'

30. *al-è*(UD. DU) equals *nabātu*, 'light up,' 'break out,' the prefix *al* being the same as *an*. Probably the city is set on fire, so it is the flame that breaks out.

31. *e-sir*(BU) equals *sûku*, *gub*(DU) equals *nazâzu*, and *sar-ri* equals *ṣarahû*; the *nî*(NIN) at the end may be a phonetic prolongation although the full force of the syllable is not very clear.

32. *sal-la-bi*: *sal-la* equals 'booty,' and *bi* is a pronominal suffix. *ur-e* equals *amêlu*. In *ûm*(A. AN)-*da-ab-la da-ab* is an

infix referring to the object *sal-la* and *lá* is the verb equal to *našû*.

33. *sig*(PA) may equal 'staff,' *gan* 'youth,' *mu* 'king,' and *bar-ri* 'judgment.'

34. *e-ne* equals *šunu*.

35. *lîm(b)*: the sign is probably LUL which sometimes means 'woe;' see Brünnow's Classified List, 7271. *êr*(A. ŠI or A. IGI, 'water of the eye') commonly equals *bikîtu*.

Glossary.

a-a, 5	ù-mu-un, 3
a-a-mu, 29	ba-e-ni(IM), 34
a-dug(KA)-ga, 21	bàn(TUR)-da, 29
a-gi-a-zu, 21	bar-ri, 33
al-è(UD. DU), 30	gaba, 7
azag, 13	gal-ta, 12
ama, 8	gan-bi, 33
ám(A. AN)-da-ab-lá, 32	gan-e, 28
a-ta, 22	gà(MAL), 16
i-de, 7	gár(ŠA)-ra-zu, 22
igi(ŠI)-ê(BIT), 1	gig(MI)-ga, 6
i(KA), 5	gûr(KIL), 1
e-gub(DU)-ba, 31	dam, 25
e-sir(BU), 31	dam-mu, 25
elim-ma, 2	damal, 12
e-ne, 34	di-di, 8
en-lil(KIT)-a-kam, 35	dimmer, 5
en-lil(KIT)-ki-zu, 10	dingir, 35
eri-zu, 1	dî(RI), 24
eri-ta, 28	dîm-ma-ta, 14
erim(SAB)-na, 8	dú(TUL), 13
ê(BIT), 15	dû(TUR), 26
ê(BIT)-gal, 18	dû(TUR)-mu, 28
êr(A. ŠI), 35	ká, 15
ud-zal(NI)-zal(NI)-la, 24	ki, 12
ur-e, 32	ki-el-e, 27
ûru(ŠIŠ)-unu-ki-ma-ta, 19	ki-lal-a-zu, 23
utu(UD)-unu-ki-ma-ta, 20	ki-zu-ge(KIT), 34
ušu(EŠ), 35	lîm(b)(LUL)-ma, 35
ù-lul-la, 9	ma, 18

ma-ma, 9	sag, 6
ma-mu, 17	sag-ga, 4
maḥ-e, 30	sal-la-bi, 32
maḥ-ta, 15	siba, 6
mu, 33	sig(PA), 33
mu-ul-lil(KIT), 5	ša(LÌB)-ê(BIT), 14
mu-un-sar-ri-ni(NIN), 31	ša(Ù), 1
mu-ni-ib-bi, 25	še-ib, 19
na-àm-mă(MAL), 5	še-kud(TAR)-da, 23
ni-tuk, 1	šes-mu, 27
ni(IM)-te-na, 7	šu-a-ta, 17
nun, 16	tur-e, 30
nu-nag, 24	tur-ra-ge(KIT), 25.

The Dasara Festival at Satara, India.—By LUCIA C. G. GRIEVE, New York City.

It is difficult for a mere European, brought up on a dictionary and accustomed to define everything accurately, to grasp the Proteanism, the fluidity, if I may so speak, of the Hindu divinity called for the most part simply Devi, the goddess, or Mai, the mother, or more simply still, Bai, the woman. Her names are legion: Mahalakshmi, Mahasaraswati, Jogeshwara, Kali, Bhawani, and many another, often strange and uncouth. But in the ultimate analysis, each female divinity, however different her attributes and forms of worship, is a manifestation of the same "eternal feminine," the goddess, the mother, the woman.

In every Hindu household in the Maratha country, Devi is one of the panchāitana, or set of five gods—the others being Ganapati, Vishnu, Sāmbh and Surya—represented by five small stones of appropriate colors and set on a tiny table in a particular order, according to the chief object of the householder's devotion. These are worshiped every morning directly after the Sandhya; but they may each and all be worshiped separately besides; and each has his particular day of the week and a high annual festival. Devi's days are Tuesday and Friday, when she is worshiped with red and yellow powder, marigolds, sweetened milk and a Sanskrit prayer.

Her great festival occurs in Ashwin (Sept.-Oct.) during the first ten days of the new moon, and is called Navarātra. Among the Maratha Brahmans are three classes: Deshasthas or hill Brahmans, Konkonasthas or Brahmans of the western slope, and Karhādās, so called from their chief town. These last, being devotees of Kali, observe this festival with great solemnity. During the whole nine days they do not shave; and they arrange a little vessel, called abhishakpātra, so that water or oil may run continually on the head of the image of Devi. On the tenth day they kindle the hōm fire (with a Swedish safety match) in the presence of many Brahmans, and end the day with a great feast.

In every Hindu house this festival is observed. The image of Devi is set up on its little throne. Every day the worshiper

makes a wreath of flowers, usually marigolds, and placing one wreath on the neck of the image the first day, adds another each day. In front of the image a square is made of corn, gram or barley, mixed with dry earth. In the midst of this is set an earthen water-pot (gāger or ghat), and on this they hang a wreath of flowers, adding another each day. Every day cakes of wheat are prepared for offering; and if the family be sufficiently rich, a married woman, a Brahman and an unmarried girl are brought in to be fed and worshiped. Every day in Brahman households, a Sanskrit prayer, *Sapta-çatti*, is read after bathing, and the worshiper must not yawn nor leave his place on any pretence, nor make a mistake in a single letter. On the tenth day the worship is concluded by a great feast, in which the different castes follow different customs.

This tenth day, the *Dasara*, is the great day of the festival, and in *Satara* the greatest feast-day of the year. *Shivāji*, the liberator of the Marathas from the Mohamedan yoke, was a devotee of *Kāli*, or *Bhāvāni*, and of course made much of her high festival. There was sound reason in this; for it occurred at the end of the rainy season when the crops were all in, and settled dry weather might be expected. Furthermore, this tenth day, the *Dasara*, commemorated the setting out of *Rāma* on his march against *Rāvana*; and what more appropriate and auspicious day for summoning his army to march against foes, who were not only their enemies in religion, but, like *Rāvana*, had frequently carried off their women? Assembling his soldiery, who were mostly farmers cultivating little patches of ungenerous soil on the rough hillsides, he personally inspected every man and horse and had an inventory made of all their possessions. Then their horses and arms were worshiped, and a day set for their departure to the predatory warfare which was their joy and strength.

During the latter days of *Satara*'s independence, when wealth had increased and valor departed, the *Dasara* procession was a grand sight. Starting from the *Rang Mahāl*, or chief palace of the Maharaja, on the upper road, the procession, numbering as many as 75 elephants in their gay housings, with instruments of music, chanting priests, prancing horses and gorgeously appaared courtiers and servitors, marched to the *Poyiche Nāka*, or city limit, two miles away; and frequently the head of the procession had reached that point long before the rear

had started. Now a solitary unhappy elephant and a few ponies represent the kingly state.

But to the people, recalling as it does the great days of old, the festival is as dear as ever. On this day every house is whitewashed or painted; wreaths of marigolds are strung across the tops of the doors; and every man puts on a new white dress. Those who have horses wash them in warm water and give them an offering of food; wine, or eggs, or something supposed to be specially acceptable. A corner of the house is swept clean and washed with cowdung; and instead of swords and guns and other weapons whose use the Government has prohibited, axes, hoes and other farm-implements are carefully washed and placed on this spot, and are given offerings of flowers and sandalwood oil and red and yellow powder. Brahmans bring a drink offering, and other castes an offering of flesh; and after showing it to the tools they divide it up among the members of the family.

In the afternoon the horses have cloths, generally the housewife's best sari, strapped on their backs; wreaths of flowers are placed around their necks; and the ladies of the family lend their anklets and even strings of gold and pearls to adorn the horses' hoofs; and if there be a light-colored creature, patterns are traced on his flanks.

In these degenerate days, if the horse belongs to a white man, the owner is supposed to worship the animal by giving a coin to the horse-boy; and this particular form of worship is not confined to Hindus but shared by Mohamedans and outcastes. Even the Sahib's cats and dogs have their wreaths of marigolds on this great day.

Early in the afternoon, the gaily dressed horses, and litters containing images of the gods, in small irregular processions, are brought to the Rāj-wādā, or chief market-square. Here booths are erected for the sale of cakes and sweets, and especially of great bundles of branches of kānchan, mountain ebony. Athletic sports of all sorts are carried on, interspersed with songs and recitations called kirtans. A large male buffalo, reda, has been fed up for ten days, or even as many months. At the appointed time he is led out in front of a temple of Bhāvānī, and after the proper ceremonies some descendant of Shivāji's family, always a man with the surname of Bhonsle, strikes off the beast's head with a sword. Two strokes may

be given, but the act is more meritorious if only one suffices. The meat is then cut up and distributed to any who will take it. Goats and hens are sacrificed by the farmer caste.

The sacrifice of these animals on this day is common throughout the Maratha country and in many other parts of India. Indeed, the Dasara festival is a national one, and on it soldiers of every faith worship their arms; but beyond that, its significance and mode of observance are different in the different parts of the country.

As soon as twilight begins to fall, the great procession is formed in front of the Rang Mahāl. Bhāvānī, Shivāji's sword, which he considered an incarnation of the goddess, and which is now kept in a small temple in the Rani's Palace, is placed on a palanquin and leads off, followed by the Rajah's elephant and ponies, the Rajah or his representative in an open carriage, the bloody sword with which the reda was slain, and the usual oriental rabble. Crowds of people of all sorts line the route, and congregate especially at the Nāka, or sentry-box marking the city limit. For Satara is an unwalled town, Shivāji believing, like the King of Sparta, that soldiers are better than bricks for defence.

In former days the procession went farther, for the purpose of worshipping an aptā or kānchan tree, the mountain ebony, which was then cut down and the leaves distributed to the crowd. This object has now been lost sight of; the procession merely passes a little beyond the city limit and then turns and goes back. Throughout the Maratha country, everyone, to keep the festival properly, must walk at least beyond the limits of his town or village, to commemorate the starting out of the army on that day. When the procession has passed the Nāka, a man comes running through the crowd with his arms full of kānchan branches, which he distributes to the hundreds of eager hands reached out to him. The recipients pull off the leaves and bestow them on their friends and acquaintance, saying, "This is gold!" This little ceremony is eminently Hindu; kānchan, besides being a name for the ebony and champak trees, also means "gold," and the leaves of the kānchan, which in size and shape resemble gold coins, are called "soni," the ordinary word for gold. This giving of "gold" leaves is said to represent the distribution of money among the crowd "in the brave days of old."

The deepening darkness is put to flight by colored lights, sky-rockets and other fire-works; and the crowds return home to feast and make merry.

This festival has in some places a darker side. The Karhādā Brahmans are strict worshipers of Devi; and her most acceptable sacrifice is a human being. This caste is perhaps one of the last vestiges of the dreaded Thugs who used to infest India; but in some respects their organization is quite different, though on that I need not dwell. The Government has attempted to suppress this sect, but has not fully succeeded. A favorite sacrifice is a son-in-law, who is invited to the house of his wife's parents and there poisoned. The best sacrifice is a wedded wife, and in return Kali promises her devotees great wealth. The proper method of conducting this sacrifice is to invite the lady to visit her mother-in-law for the whole ten days' festival. There she is made much of, given presents, bathed in perfumes, clad in fine new garments, and wreathed with flowers. Meanwhile, in the god-room, a hole has been dug in the floor in front of Devi's image, the sacred hōm fire is kindled, prayers are said into the hole, and a lighted lamp set in each corner. At the right moment the unsuspecting victim is brought in and suddenly thrown into the hole, and the earth piled in on top. While I was in Satara an attempt was made to perform this sacrifice in a nearby village; but at the last minute the girl discovered the plot, and, escaping, fled to her father's house, where she was protected against her too religious friends.

Since the British Government is so inconsiderate and oppressive as to interfere with these little family matters, the usual method now is by poison; and such masters in the poisoning art are the Hindus that the dose may be administered many days previous to the intended death of the victim. It is even said that as long as six months before the festival, poison may be given which will cause the victim to die on the proper day. Though currently believed, this is not easy to credit; and by its nature is a matter not susceptible of investigation.

Next after their kindred-in-law, the best sacrifice is a Konkon Brahman; and in such dread do the Konkonasths hold their Karhādā fellow-castemen, that they would rather die of starvation than risk taking food at their hands.

The Interrelation of the Dialects of the Fourteen-Edicts of Asoka. 1: General introduction and the dialect of the Shāhbāzgarhi and Mansehra redactions. — By TRUMAN MICHELSON, Ph. D., Ridgefield, Conn.

IN investigating the dialects of the Fourteen-Edicts of Asoka, it is necessary to remember that the Shāhbāzgarhi, Mansehra, and Gīrnār redactions are translations of an original composed in a dialect essentially the same as the dialects of the Dhāuli, Jaugaḍa, and Kālsī (edicts i—ix) recensions of the Fourteen-Edicts and the dialects of the six versions of the Pillar-Edicts; and that the dialect of this 'Māgadhan' original has left traces in them. The dialect of the Kālsī redaction presents a rather curious problem: in edicts i—ix the dialect is practically pure 'Māgadhan,' with but few traces of the local dialect, but in edicts x—xiv the local peculiarities are prominent; yet at the same time the dialect is intimately related with the dialect of the Dhāuli and Jaugaḍa texts—for these two redactions are practically the same in both content and language. And as a matter of fact we can find a few faint traces of the local dialect in even the Dhāuli and Jaugaḍa texts. Examples are Dhāuli *vuḷhī* for 'Māgadhan' *vaḷhim*; Dhāuli and Jaugaḍa *bābhana-* for *baṃbhana-*. (That *baṃbhana-* was the 'Māgadhan' correspondent to Sanskrit *brāhmaṇa*—is shown by the invariable *baṃbhana-* of the Kālsī text as well as by the occurrence of *baṃbhana-* in Dh., J. also.) If *savatu* at J. ii, 9 is not a mere blunder for *savata* (Sanskrit *survatra*)—which is found several times in J. as well as Dh., and the 'Māgadhan' portion of K.—it is a local peculiarity. The 'Māgadhan' dialect was undoubtedly the official imperial language, and hence—as Pischel has very justly remarked—understood even where it was not spoken as a vernacular. How far the 'Māgadhan' dialect as a koine had influenced the other local vernaculars, is impossible to say with certainty: but the 'Māgadhisms' in the Gīrnār, Shāhbāzgarhi, and Mansehra recensions give the impression that they were taken over bodily from the original manuscript, and were really foreign to the spoken vernaculars.

The dialect of the fragment of the eighth edict of the Sopārā version (ed. by Bhagvānlāl Inārajī, JBOAS. xv, 282—288) must be passed over in the present paper for two reasons, to wit, that the fragment is extremely small, and that it fairly bristles with easily recognizable ‘Māgadhisms.’ Examples of these are: *nikhamithā*, line 5; *heta*, *baṃbha[na]*-, *iyam*, *hoti*, line 6 (*hoti* also line 9); *dasane*, line 7; *vudhānam*, *paṭividhāne*, line 7; *ye* (read *bhūye*), line 9; *ane* (i. e. *aṃne*), line 10. It may be mentioned, however, that the dialect agreed with that of the Shāhbāzgarhi, Mansehra and Gīrnār recensions in maintaining *r* as opposed to the *l* of the Dhauli, Jaugaḍa, and Kālsī versions as is shown by *rati* in line 9. This fact enables us to interpret *hiraṃna*- in line 7; it is a cross between native *hiraṃṇa*- (so the Gīrnār text) and ‘Māgadhan’ *hilaṃna*- (so the Jaugaḍa and Kālsī redactions). Shāhbāzgarhi and Mansehra *dhraṃma*- has long been recognized as a cross of the same type (cf. Shb. and Mans. *dhrama*-; and Dh., J. and K. *dhaṃma*-); and I have tried to show in IF. xxiii, pp. 240, 241 that Shāhbāzgarhi *prati* is to be judged the same way; moreover I hope to show in my forthcoming paper mentioned below, that crosses of this type are far commoner than supposed. It is perhaps worth while noting that *-jina* in line 10 is to be read *rājine*, and so is identical with Mansehra *rajine* which has been recognized as standing for native *raño* (i. e. *rāño*) through the influence of ‘Māgadhan’ *lājine*.

Another point that must be born in mind is the fact that the dialect of the Shāhbāzgarhi and Mansehra recensions is practically identical. In my opinion if we had texts absolutely free from ‘Māgadhisms,’ it would be absolutely identical. It may be remarked that the evidence of both texts makes it comparatively easy to detect ‘Māgadhisms’ in either individual text. Thus Shāhbāzgarhi *prati* shows that Mansehra *paṭi* is a ‘Māgadhism;’¹ similarly Mansehra *spagam*, i. e. *spargam* (Sanskrit *svargam*) shows that Shāhbāzgarhi *spagaṇ* is a partial ‘Māgadhism’ (cf. J. and K. *svagam*): the evidence of Shāhbāzgarhi and Mansehra *vagrena* (i. e. *vargena*) confirms this.

There are certain points of interest to the general Indo-European comparative philologist in the dialects of the Four-

¹ See Michelson, IF. xxiii, p. 240.

teen-Edicts of Asoka. For example long syllabic \bar{m} appears as \bar{a} —and this only—in the dialect of the Girnār version, e. g. *atīkrātam* (Sanskrit *atīkrāntam*). This shows that this dialect is not a linear descendant of Sanskrit. Again the short \bar{u} of Girnār *susrūsā*, *susrūsātām* is noteworthy in view of Avestan *susrūšəmnō*. Moreover Shāhbāzgarhi, Mansehra, and Kālsi *kiti* come from *kid + iti*, not *kim + iti* as Johansson (Shb. ii, p. 52) has shown,¹ Likewise it is worth while noting that Girnār *srūnāru*, Shāhbāzgarhi *śrūṇeyu*, Mansehra *śrūṇey[u]* agree with Avestan *surunaoiti* in structure as opposed to Sanskrit *śṛṇoti* as I shall shortly demonstrate in Zverg Sp. Furthermore the fact that the dialects of the Shāhbāzgarhi and Mansehra redactions have *st* corresponding to Sanskrit *ṣt(h)* would seem to indicate that the lingualization of *t* and *th* respectively in Aryan *ṣt* and *ṣth* (Avestan *št*) was Pan-Indic and not Proto-Indic. (We may say Pan-Indic, even if this is not strictly accurate, for nearly all the Indic languages point to this: cf. Sanskrit *ṣt(h)*, Girnār and Māgadhi Prākṛit *st*, Pāli and ordinary Prākṛit, Dhāuli, Jaugada, Kālsi, etc. *tth* (written *th* on the Asokan inscriptions).

But in fairness I should remark that Girnār *uṣṭāna*- and other Middle-Indic words cited by Johansson to demonstrate his thesis that I. E. *tst(h)* became *st(h)* in the I. E. period, in reality are not valid evidence, quite irrespective of the correctness or falsity of his contention, as I hope soon to show in the *Indogermanische Forschungen*.

It is proper for me to state that with Johansson and Franke. I reject Senart's theory of historical and learned orthography in the inscriptions of Asoka.

Certain linguistic facts mentioned by me in the present paper will be proved at length in my 'Linguistic Notes on the Shāhbāzgarhi and Mansehra Redactions of the Fourteen-Edicts of Asoka' which is to appear in the American Journal of Philology, presumably in numbers 119 and 120. The same applies to the value of certain symbols used in these texts; certain linguistic statements concerning the dialect of the Girnār redaction will also be fully discussed in the same paper.

¹ According to Dr. Bloch the reading *kīti* on the Rāmpūrvā Pillar is really *kiṃ ti*. If *kīti* were correct we should connect it with Shb., etc. *kiti*: see IF. xxiii, p. 253.

Where there is dispute regarding the precise values of certain characters in the Gīrnār recension, I have in most cases briefly indicated the value I think should be assigned to said characters, and the reason thereof. But I expect to take these up systematically later.

In certain cases it is not easy to determine whether a given form in the Shāhbāzgarhi, Mansehra, and Gīrnār redactions is a 'Māgadhism' or is really native to the dialects of these texts. For example in the Shāhbāzgarhi and Mansehra versions two different formations in the gerund are to be found, namely, one in *tī* (i. e. *tī*, Vedic *tvī*) and one in *tu*. Now there is but one form of the gerund in Dhauli, Jaugaḍa, and Kālsī recensions, to wit, that in *tu*. It therefore seems plausible to consider the gerunds in *tu* in Shb. and Mans. to be 'Māgadhisms,' especially as but one form of the gerund, that in *tpā* (Sanskrit *tvā*), is native to the Gīrnār redaction. Yet as the dialects of the Shb., Mans., Dh., J., and K. texts are in concord as opposed to the dialect of G. in some particulars—few, to be sure, when contrasted with the linguistic agreement of the dialects of Shb., Mans. and G. as opposed to the dialects of Dh., J., and K.—this conclusion does not necessarily follow.

It will be understood that in giving the characteristics of the dialects, the 'Māgadhisms' are for the most part passed over in silence. Where there is room for doubt, I have tried to demonstrate briefly whether the form is a 'Māgadhism' or not. Where a long elaborate proof is necessary to decide the point involved, I have given reference to my paper which is to appear in the AJP.

The orthography of the Shāhbāzgarhi and Mansehra redactions, as well as that of the Kālsī recension, limit our investigations to a certain degree. Thus it is impossible to say whether Shāhbāzgarhi and Mansehra *puna* is the equivalent of Gīrnār *puna* or Kālsī *punā*, or both; for vowel quantities are not distinguished in the Kharoṣṭhi alphabet; nor is *i* distinguished from *ī*, *u* from *ū* in the Kālsī redaction.

Bühler's editions of the Gīrnār, Shāhbāzgarhi, Mansehra, and Kālsī recensions in *Epigraphia Indica* ii, 447 ff.; and his ed's of the Dhauli and Jaugaḍa redactions in *ZDMG.* 39, 489 ff. and 37, 87 ff. respectively have been made the bases of our investigations; though his ed's of Shb. and Mans. in *ZDMG.* 43 and 44 have been consulted; as well as his ed's of Dh.

and J. in the 1st vol. of the Archaeological Survey of Southern India.

Franke, Pāli und Sanskrit, p. 108ff. should also be consulted for dialectic peculiarities. Johansson's essay on the dialect of the Shāhbāzgarhi (and incidently the Mansehra) redaction is a systematic exposition by a comparative philologist. I have consulted it constantly, but the material in this paper is drawn from the inscriptions themselves. It should be noted that Johansson does not state what the characteristics of the dialect are, and treats the general relations of this dialect with the dialects of the other redactions only in a general way (see ii, pp. 24, 25). The present paper and my "Linguistic Notes on the Shāhbāzgarhi and Mansehra redactions of the Fourteen-Edicts of Asoka" which is to appear in AJP. (presumably in no's 119 and 120), are designed to supplement Johansson's work.—Konow's treatise on the dialect of the Gīrnār recension is descriptive only, and nearly neglects the phonology.—Senart's treatment of the various Asokan dialects is now nearly antiquated, though valuable at the time.

With this general introduction ended, we will now proceed to investigate the separate dialects.

Dialect of the Shāhbāzgarhi and Mansehra redactions.¹

The most important characteristics of this dialect are: three sibilants which correspond as a whole to the same sounds in Sanskrit, though subject to certain phonetic laws which have a slightly modifying effect² (*paśu-*; *śramaṇa-*; *aśilasa*; loc. pl. *-eṣu*; etc.); *r* is not assimilated to any adjacent consonants whatsoever³ (*śravakam*, *sramaṇa-*, *suśruṣa*, *saḥasra-*, *mitra-*,

¹ In the following citations, the forms are found in both versions, unless expressly stated to the contrary.

² These laws are: 1. *ś-* is dissimilated to *s* if the next syllable begins with *ś*, 2. intervocalic *s* is assimilated to *ś* if the preceding syllable contains *ś*, 3. *ṣiy* and *ṣy* become *śś* (written *ś*), 4. Aryan *śt* and *śth* become *st*. Exceptions are 'Māgadhisms'. The whole matter is taken up in detail in my paper which is to appear in the AJP. Examples are: *suśruṣa*, *anuśaśiṣanti*, *manuśa-*, Shb. *tistiti*, Mans. *[ti]stitu*.

³ Such is the view of Johansson. In AJP. I hope to show that we can hardly avoid assuming that *r* was in fact assimilated in the combinations *ārṣ* and *ārṣy* (in this case *ṣṣ* not *śś* is the result).—In the same periodical I take up the entire question as to whether *dhrama-* is merely

parakramena, *agrena*, *vagrena*, i. e. *vargena*, *athrasa*, i. e. *arthasa*, *dhrama-*, i. e. *dharma-*, *pruva-*, i. e. *purva-*, *savram*, i. e. *sarvam*, etc.); vocalic *r* becomes *ir* ordinarily, *ur* after labials (Shb. *kitram*, i. e. *kirtam*, Mans. *vudhrana*, *vudhresu*, i. e. *vurdh-*, Shb. *mrugo*, i. e. *murgo*);¹ *h* in the combination *hm* is assim-

graphic for *dhrama-* (as Senart, Bühler and Johansson hold) or really represents *dhrama-* (as Pischel holds), and similar combinations. I come to the conclusion that those who hold that *dhrama-* is merely graphical for *dharma-* are right. The matter is an exceedingly complicated one, and not to be disposed of in a few words. I therefore ask the reader to consult my article in AJP.—Johansson holds that *r* is assimilated to dental stops (which then become linguals) in the dialect of Shb. (He does not discuss the dialect of Mans. in this connection.) I have exhaustively taken up this problem in the previously mentioned paper. My conclusions are that *r* in fact is retained before dental stops in both Shb. and Mans. but that 'Māgadhisms' have largely supplanted the true vernacular forms in both texts. Briefly my arguments are as follows: it being agreed that the language of Shb. and Mans. is practically identical, it would be strange if Mans. and Shb. should differ in such a point. Now in Mans., *athra-* (merely graphic for *artha-*) occurs a dozen and a half times; so there can be no question but that in the dialect of Mans. *r* is not assimilated to an immediately following *th*, for no other correspondent to Skt. *artha-* is found in Mans. This makes it certain that the single *athra-* of Shb. is the true native form, and that *aṭha-* (i. e. *aṭṭha-*), found more than a dozen times, is a 'Māgadhism' as *aṭha-* and this only is the correspondent to Skt. *artha-* in the Dhāuli and Jaugadā versions of the Fourteen-Edicts as well as in the six recensions of the Pillar-Edicts. As a parallel where a 'Māgadhism' has nearly driven out the native form in Shb. but never occurs in Mans., we have *sava-* (the true native form is *savra-* which is found several times in Mans. and a few times in Shb.). The word *aṭhra-* in Shb. is a blend of native *athra-* and 'Māgadhan' *aṭha-* exactly as Shb. and Mans. *dhramma-* is a cross between *dhrama-* and *dhamma-* (this last has long been recognized). Mans. *vadhrite* (i. e. *vardh-*) and *vadhrayisati* (i. e. *vardh-*) show that *r* was not assimilated to an immediately following *dh*; but 'Māgadhisms' have largely usurped the place of the true native forms in Mans., and exclusively obtain in Shb. (On Shb. *diyadha-* see AJP.) 'Māgadhisms' or crosses between 'Māgadhisms' and the true native correspondent to Indic *rt* have ousted the vernacular correspondent in both Mans. and Shb.

¹ The history of Indic *r* in both Shb. and Mans. is treated in detail in the paper mentioned above. Scholars are divided as to whether *mrugo* represents *murgo* or *mruḡo*. Bühler holds the latter, Johansson the former. Likewise there is dispute as to whether *vudhra-* represents the actual pronunciation or is merely graphical for *vurdha-*. I have tried to show that the view of those who hold that *mrugo* and *vudhra-* are respectively merely graphical for *murgo* and *vurdha-* alone is tenable. I have also tried to demonstrate that all other apparent products of Indic *r* than *ir*

lated (*bramana*-); *tm* is retained¹ (Mans. *atma*-); *sm* before *i* becomes *sp*² (loc. sing. of *a*-stems, taken from the pronominal declension, **aspi*, *-*asmi*, cf. Avestan -*ahmi* as opposed to Sanskrit -*asmin*); *suv*- and *sv*- become *sp*-² (*spanikena*, cf. Dh. J. K. *suvāmikenā*, Shb. *spasunaṃ*, Mans. *spasuna*.³ Skt. *svasar*-. Mans. *spagran*, K. etc. *svagam*, Skt. *svargam*); *viiy* and *vy* become *vv*⁴ (Shb. gerundive -*tava*-, i. e. *tavva*-, e. g. *vataro*, Skt. *vaktavyās* [see Whitney, Skt. Gr.³ § 964c end]. *divani*, Skt. *divyāni*); *dr*- becomes *b*-⁵ (Shb. *badaya*-, a mistake for *badāsa*-); *tv* becomes *tt*, written *t* and *tt* (gerund in *ti*, Vedic *tvī*; *tada-ttaye*, Skt. *tadātva*-); *my* becomes *mm* (Shb. *samma*-, Skt. *saṃyak*-); Aryan *št* (Skt. *ṣṭ*, Av. *št*) and *šth* (Skt. *ṣṭh*, Av. *št*) alike become *st* (Shb. *asta*-. so probably in the 13th edict, Shb. *dipista*, Skt. (a)*dipīṣṭa*; Shb. *tistiti*, Skt. **tiṣṭhitvī*, Mans. *tistitu*, Skt. **tiṣṭhitu*); *ñj* becomes *ññ*, written *ñ* (Shb. *vañanato*, Skt. *vyañjanatas*); *d* is retained in the Iranian loan-word *dipi*; intervocalic *j* becomes *y*⁶ (Shb. *raya*, *sumaye*, *Kaṃboyu*-, *Kaṃbojeṣu*, *prayuhotave*;

and *ur* in both Shb. and Mans. are either 'Māgadhisms' or blends of 'Māgadhisms' and native forms; and that *r* does not lingualize following dental stops in the true native forms of both Shb. and Mans. The whole problem is exceedingly complex and can only be summarized here.

¹ Native *tm* in Shb. is completely ousted by 'Māgadhan' *tt* (written *t*) exactly as native *prati* by 'Māgadhan' *paṭi* in Mans. (See Michelson, IF. xxiii, pp. 240, 241.)

² The exact value of the symbol which Bühler transcribes by *sp* is in dispute. Provisionally I follow Bühler. The 'Māgadhan' loc. sing. -*asi* has largely taken the place native -*aspi* in both Shb. and Mans.

³ Graphically *ṃ* is often omitted.

⁴ In Mans. the 'Māgadhan' gerundive -*taviya*- has completely usurped the place of native -*tava*- as Franke already has said; it is found a few times in Shb.

⁵ In my judgment (contrary to the opinion of Johansson), Mans. *duvadaśa*- is a Māgadhism as well as Shb. *duvi* and Mans. *duve* (cf. Kālsī *duve*, etc.)

⁶ Johansson, Shb. i, p. 177, 63 of the reprint, judges Shb. and Mans. *uyanaspī* (so for his -*asi*) wrongly. According to him it is 'eigentl. wohl *ujana*- st. *ujjana*.' Shb. and Mans. *uyanaspī* is merely graphical for *uyyāna*-. That is to say that -*d y*- in word-composition have a different history than -*dy*- when not in word-composition (per contra, note *aja*, i. e. *ajja*). The same holds true for the dialects of the Gīrnār, Dhauḷi, Jaugaḍa, and Kālsī recensions of the Fourteen-Edicts; cf. G. *uyānesu*, Dh. (*u*)*yān*[*asi*], J. and K. *uyānasi* as contrasted with G., Dh., J. *aja*, K. *ajā* (Skt. *adya*, Vedic *adyā*). That the *y* is purely graphic for *yy* and the *j* for *jj* is shown by Pāli *uyyāna*-, *uyyāma*-, *ajja*. See Henry, Précis, section 87, 3 and E. Müller, Pāli Gr. p. 49; and for the principle

Mans. *pra[yuho]taviye*); intervocalic *h* is either lost, or weakly pronounced (*ia*, Mans, *maa* as contrasted with Shb. *ma[ha]*); Indic *nīh* appears as *nī* in compounds (Shb. *nik[r]amatu*, Mans. *nikramanttu*, *nikramiṣu*; Shb. *nikramaṇaṇi*);¹ *h* as the correspondent to Indic *dh* in Shb. *iha*; Indic **utthānam*² is retained

Jacobi, Erz. section 36. Windisch in his essay on Pāli (in the transactions of the International Congress of Orientalists held at Algiers) overlooks this fact when he takes Pāli *uyyāna-* as a Māgadhan relic. In Prākṛit *-d y-* in word-composition necessarily has the same history as *-dy-* when not in word-composition, i. e. *jj*, Māgadhi *yy*. Against Johansson's supposition that where we have *y* for *j* in Shb. (and Mans.), it can be safely considered a 'Māgadhism' is the following important fact, viz., that *y* for *j* is never found in the Dhauli, Jaugada, or Kālsī redactions of the Fourteen-Edicts, and yet it is agreed that the dialect of the 'Māgadhan' original—of which Shb. and Mans. are translations—was composed in a dialect essentially the same as the dialects of these redactions. That *j* becomes *y* in Māgadhi Prākṛit according to the native grammarians proves nothing, for Māgadhi Prākṛit has only two noteworthy agreements with the Māgadhan dialects of the Asokan inscriptions, namely that *l* takes the place of *r* and *-e* of original *-as* (*-o* in the other dialects): but Māgadhi Prākṛit has one special agreement with the dialect of the Gīrnār redaction, namely that Aryan *śt* (Skt. *ṣṭ*) and *śth* (Skt. *ṣṭh*) fall together in *śt*. I take Shb. and Mans. *majura-* to be a 'Māgadhism': cf. the correspondent in the versions of Dh., J., K.

¹ Johansson (Shb. ii, p. 17) is in error when he places *nikramiṣu* in the same category as *dukaraṇi*, Shb. *dukataṇi*, Mans. *dukata* (final *ṇ* graphically omitted). In the first place [*dukaṭaṇ* and *dukata* are 'Māgadhisms' as I shall show in AJP. (cf. Kālsī *dukaṭaṇ*), and so must be left out of consideration. In the second place, note the difference in Kālsī *dukaṭaṇ*, *dukale* and *nikhamanttu*, *nikhamiṣu*, *nikhamiṭhā* (possibly *-thā*), *vinikhamane*; cf. also Dhauli and Jaugada *nikhamāvū* (for the formation see Johansson, Shb. ii, p. 89, footnote 2). Shb. *joti-kamdhani* is certainly a 'Māgadhism' as is shown by Mans. *agi-kaṇḍhani*, K. and Dh. *agi-kaṇḍhāni*; Gīrnār *agi-khaṇḍhāni* points in the same direction, cf. the contrast with *dukaraṇi*, *dukataṇi*. Johansson read Gīrnār *agikaṇḍhāni*, and so offered an explanation which he thought preferable to the one given, but the *kh* is absolutely certain: see the plate in Epigraphia Indica ii.

² I see no reason why Shb. *uthanaṇi*, i. e. *utthānaṇi*, should not be considered the true native word, and hence the exact equivalent of Skt. *utthānam*. The fact that the termination in any case is the vernacular one, supports this view. Per contra note the 'Māgadhan' endings *-e* and *-asi* in Mans. *uthane*, Shb. *uthanasi*, Mans. *uṭhanasi*. That these last cited forms are 'Māgadhisms' is absolutely certain as Johansson previously saw. Johansson regards Shb. *uthanaṇi* also as a 'Māgadhism'. This is highly improbable because **uthāna-* never is found in any of the so-called Māgadhan versions of the Fourteen-Edicts. That the *th* of Shb. *dhrama-dhithanaye* and *dhramadhithan[e]* is not a careless writing for *ṭh* is shown

(written *uthanam*); *śc* appears as *c*¹ (graphical for *cc*? *paca*): the *r* of *Kerala*-; the nom. sing. masc. of *a*-stems a few times apparently ends in *-a* (Shb. *jana*, etc.); original *r*-stems become *u*-stems (*pituna*, Shb. *bhratunam*, Shb. *spasunam*, Mans. *spasuna*, Shb. and Mans. *matapituṣu*); nom. pl. of the cardinal number 4 *caturō* (Shb. *cature* with 'Māgadhan' *-e* for *-o*); the locative plurals *pañcaṣu* (Shb. *pa[mca]ṣu*, Mans. *pañ[caṣu]*) and *ṣaṣu* by the analogy of *a*-stems; the genitive sing. of the first personal pronoun *maha* (Shb. *ma[ha]*, Mans. *maa*:² see above); *ayo*³ as a nom. sing. (only in Shb.); the peculiar optatives

by Mans. *dhramadhithanaye*, *dhramadhithane*, Kālsī *dhāmāmādhithānāye*. [For the views of Johansson, see his treatise on the dialect of the Shb. recension, i, pp. 165, 166 (51, 52 of the reprint), 168, 169 (54, 55), 170 (56); ii, pp. 17, 18.] These forms are 'Māgadhisms.' On 'Māgadhan' *uthāna*- and Gīrnār *uṣṭāna*-, see my coming paper in IF.

¹ So Bühler reads in the two occurrences of the word in Shb. as well as Mans. in his ed's of these recensions in ZDMG. 43, 44; but in his ed's in Epigraphia Indica ii he reads *pacha* for the occurrence in the 13th edict for both Shb. and Mans. (Bühler in EI. *chh* for *ch*); so that I am not sure but his readings in EI. are really a mistake. The devanāgarī transcript in ZDMG. settles the reading in the 1st edict. If not a blunder, then Mans. and Shb. *pacha* (his *pachha*) in the 13th edict are 'Māgadhisms'; cf. Kālsī [*pa*chā (B's [*pa*chhā)]. [His reading *pacā* (*pachā* in his transcription) in the 13th ed. of G. in ZDMG. 43 is an error.]

² Johansson, Shb. ii. section 118 (end) explains this as 'wohl eine Kor-fusionsbildung von *mama* und *ahan*.' This does not strike me as convincing. The same form is found in Prakrit. Pischel's explanation (Gr. section 418) that it corresponds to Skt. *mahyam* is phonetically impossible. The simplest solution seems to me is that *maha* is for **mama* by influence of **mahyam*. If we cared to go outside the Indic sphere, other solutions—all more or less bold—readily would suggest themselves.

³ According to Johansson, Shb. ii, p. 46, under different accentual conditions *-am* becomes *-aṃ* and *-o* in our dialect. I am not convinced of this. To begin with, a considerable portion of the material brought forward in reading is not decisive as Johansson himself admits (see p. 45, footnote 1). If the law be correct, extensive levelling must have taken place. It should particularly be observed that *ay'aṃ*] is found as well as *ayo*. In my opinion *ayo* is for *ayaṃ* by the analogy of the nom. sing. masc. of other pronouns such as *so*, *yo*, etc. The form *ayi*, I hold to be a hyper-Māgadhimism: see IF. xxiv, p. 55. *Iyo* is a blend of native *ayo* and 'Māgadhan' *iyaṃ*, and is directly comparable to *dhraṇṇma*- a cross between native *dhrama*- and 'Māgadhan' *dhama*-. The sole support for Johansson's theory according to the text of Bühler in EI. seems to be *dhramo*, acc. sing. at Shb. xii, 6; and it is not venturesome to pronounce this a simple error (cf. Mans. *dhramam* in the corresponding passage as well as the quite numerous other accusative singulars of masculine

siyasu and *hamñeyasu* (Mans. has lacunas where the forms would otherwise occur); gerund in *tī* (written *ti*) corresponding to Vedic *-trī* (Shb. *tistiti*, Mans. *darseti* **darsayitvī*); certain lexical features such as *atra*, *apagratho*¹ (Mans. has a lacuna in the corresponding passage), Shb. *meñati* (if not a blunder for *ma-* it corresponds to Gothic *mainjan*, Old Bulgarian *měnti*), Shb. *joti-* (Skt. *jyotiṣ-*), Shb. *vuta* (i. e. *vuttā*, Skt. *uptāni*), Shb. *vidhenam* (if not a mere blunder; see Johansson, Shb. i, p. 134, 20 of the reprint), Shb. *vracanti*, Shb. and Mans. *tathan*,² Mans. *raṇ*, Shb. *vo*,³ Mans. *aśatasa*, Shb. *aśamanasa*, Mans. *spasuna*, Shb. *spasunam*, Shb. *yo*,⁴ Shb. *yamatro*.⁵

From the above it will be seen how much nearer to Sanskrit the dialect of the Shāhbāzgarhi and Mansehra redactions is than the dialects of the other versions of the Fourteen-Edicts. Geographically this is just what we should expect.

a-stems in both Shb. and Mans.). On the gender of *ayo*, see Johansson, l. c., ii, pp. 34 (footnote 2), 79. *Iyam* in both Mans. and Shb. is a 'Māgadhism'. I may add that J's [*imo*] vanishes in the ed. in EI. and is replaced by *imaṇ*; his *im*[**o*] by *im*. which can be for *imaṇ*; and *ayi* is read at Shb. vi, 1, *ayo* at Shb. xiii, 11.

¹ On the etymology of this word, see Bühler, ZDMG. xliii, p. 174.

² On *tathan*, see Johansson. Shb. ii, p. 39.

³ On *vo*, see Johansson, ii, pp. 44, 45; Franke. Pu Skt., pp. 105, 151. Mans. *raṇ* corresponds to Skt. *evam*; cf. Johansson, Shb. i, p. 154, 40 of the reprint.

⁴ The etymology of this particle has not yet been solved. Johansson, Shb. i. pp. 154, 155 (40 and 41 respectively of the reprint) rightly saw that Bühler's explanation was untenable. The suggestion of Johansson that *yo* stands for **yava*, a doublet of *eva*, is too far-fetched. His alternative will not be taken seriously. *Yo* is a fossilized nom. sing. masc. of *ya-* as is shown by the correspondents to Shb. *yo* (not the particle) at x, 21 in the Mansehra and Kalsi redactions, namely. *yaṇ*. Similarly Shb. *so* and 'Māgadhan' *se* as adverbs are fossilized nom. sing. of *sa-* as is shown by the Gīrnār correspondent *ta* (**tad*). (Shb. *so* and 'Māgadhan' *se* are treated by Johansson, Shb. ii, pp. 42–44 without coming to any definite decisions. However brilliant his suggestions are. his combinations are strained and complicated as compared with the solution offered above.) Shb. *cayo* (also hitherto unsolved) is simply *ca*+*yo*.

⁵ On the etymology of this word, see Johansson, Shb. ii, p. 98. Here again, I think Johansson goes too far afield in turning to extra-Indic Indo-European languages to explain this difficult word, admitting that occasionally we must do so to properly explain certain Middle-Indic words. I see no reason why *yamatro* may not be analyzed as *ya*+*mātro*, a possessive adj. compound meaning 'as many as.'

Indeed the dialect of Shb. and Mans. hardly belongs to the Middle-Indic stage of development.

We have next to take up the general relations with the dialects of the other recensions.

Special points of contact with the dialect of the Gīrnār version.

These are very numerous. It is instructive to notice how much more striking the points of contact are between the dialect of Shb. and Mans. and the dialect of G. than between the dialect of Shb. and Mans. and the 'Māgadhan' dialects.

Examples are: final *-as* appears as *-o*;¹ *st* is retained (Shb. Mans. *nasti*, Gīrnār *nāsti*; Shb. *dhramasaṃstave*, G. *dharmasamstavaro*; Shb. [*ha*]stino, Mans. *hastine*, G. *hasti-*; Shb. *vistritena*, G. *vistatana*, etc.); the sound *r*; the sound *ṛ*² (Mans. *dhramacaraṇa*, Shb. *dhramacaraṇam*, G. *dharmacaraṇam*; Shb. Mans. *bramana-*, G. *brāmhana-*, etc); *ññ* (written *ṇṇ* and *ñ*) from Indic *ny*³ (Shb. G. *aṇṇa-*, *aña-*, Mans. *aña-*); *jñ* becomes *ñ* initially, and either *ññ* or *ñ* medially (Shb. *ñutinam*, Mans. *ñatina*, G. *ñātinaṃ*; Shb. *raña*, *raño*, G. *rāñā*, *rāño*);⁴ *ll* (written

¹ In Mans. 'Māgadhan' *-e* has entirely wiped out native *-o*.

² In cases endings *ṛ* is replaced by *n* through the analogy of other words where dental *n* is obtained phonetically. This is true for Mans., Shb., and G. There are a couple of cases where the same phenomenon takes place in suffixes in the dialect of Shb. See Johansson, Shb. i, p. 166 (52 of the reprint), and Michelson, AJP. xxx, l. c. J's *ka[lanam]* vanishes in Bühler's ed. in El. ii; I take *garana* to be a blunder for **garaha*, following Bühler. On *Taṇbapamī*, see Michelson, IF. xxiv, p. 55; also on *Pitinka-*. On Bühler's reading *kāranam* in G. see Michelson, l. c. p. 53.

³ In Mans. we have doublets with *ṇṇ*² (written *ṇ*; e. g. *aṇa-*, *aña-*, *maṇati*, *mañati*). Similarly Mans. *puṇam*, *puñam* but always Shb. *puñam* (G. *puṇṇam*, Skt. *puṇyam*). I know no thoroughly satisfactory explanation of the doublets. The best I can offer at present is that as *ṇ* and *ñ* alike were foreign to the dialect of the Māgadhan scribe, he was careless in distinguishing the two or was ignorant of their proper usage. The forms with *ṇ* then are purely fictitious. For the possibility of the principle, see Johansson, Shb. ii, p. 43.

⁴ The alphabets of Shb., Mans., and G. hinder us from being positive in the matter. For Shb. *raña*, *raño* can be either *rāñā*, *rāñño* or *rāñā*, *rāño* (and conceivably *rāññā*, *rāñño*); while G. *rāñā*, *rāño* can be either *rāñā*, *rāño* or *rāññā*, *rāñño* (it will be recalled that long vowels are not shortened before two consonants in the dialect of G.). Pāli and the various Prākṛit languages point to *ññ* in the forms. Shb., Mans. *aṇapemī*,

l) from Indic *ly* (Shb. Mans. *kalāṇa*-, G. *kalāṇa*;- cf. Pāli *kallāṇa*-); *bh* is retained in the correspondents to Skt. *bhavati*, *bhūta*-¹ [as a participle] (Shb. Mans. *bhoti*, G. *bhavati*; Shb. Mans. *bhuta*-, G. *bhūta*-); partial agreement is not assimilating *r* to adjacent consonants² (Shb. Mans. *sarvatra*, i. e. *sarvatra*, G. *sarvatra*; Shb. Mans. *parakrameṇa*, G. *parākramena*; Shb. G. *priyo*, Mans. *priye*; Shb. Mans. *śramaṇa*-, G. *sramaṇa*;- Shb. *śatasahasra*-, G. *satasahasra*;- Shb. Mans. *braṇaṇa*-, G. *brāhmaṇa*-, etc.); Indic *kṣ* becomes *cch*, initially *ch*³ (written *ch* in both cases), e. g. Shb. *achati*, G. *achatiṃ*, Shb. *[chum]ti*, G. *chāti[m]*; *ty* becomes *cc* (written *c*), e. g. Shb. *apaca*, G. *apacam*; initial *y* is retained in relative pronouns and adverbs (frequently omitted in the 'Māgadhan' versions; so it would appear that it was either wholly lost in actual pronunciation or very weakly pronounced); *evaṃ* not *hevaṃ* is the correspondent to Sanskrit *evam*; the inflection Shb. *raṇa*, *raṇo*, G.

Shb. *aṇapayami*, Shb. *aṇapitaṃ*, Mans. *aṇapita*, Shb. *aṇapeṣanti*, Mans. *aṇapayisati* offer some difficulty when contrasted with G. *āṇapayāmi*, *āṇapitaṃ*, *āṇapayisati*. Johansson (Shb. i, p. 165, 51 of the reprint) considers the initial *a* as long and that *ṇ* phonetically became *ṇ*. Note that we have the same phenomenon in Pāli, e. g. *raṇṇā*, *raṇṇo*, *yaṇṇo*. *āṇapeti*, *āṇatti*. In ordinary Prākṛit *jñ* becomes *ṇṇ* (initially *ṇ*), in Māgadhī and Paisacī *ññ*. For the agreement of Pāli with Shb. Mans. in this point as opposed to G., note Pāli *hiraṇṇam*, Shb. *[h]i[ra]ṇa*-, Mans. *hiṇa*- (read *hiraṇa*-), G. *hiraṇṇa*-.

¹ 'Māgadhan' *hoti* has nearly everywhere usurped the place of native *bhoti* in Mans.; similarly *kūta*- (written *kuta*-) the place of *bhūta*- (written *bhuta*-); *hotu* has everywhere taken the place of *bhotu*. In Shb. *hoti* is found a couple of times. In G. *hoti* is found a few times but *bhavati* is greatly predominant. That *hoti* is a 'Māgadhism' is shown by the fact that the Dhauli, Jaugada, and Kālsī redactions have *hoti* and this only as the correspondent to Sanskrit *bhavati*. Similarly regarding *kuta*- and *hotu*.

² The law for the retention or assimilation of *r* in conjoint consonants in the dialect of G. is: *r* is retained after stops and sibilants; and before *v*; is assimilated to following stops, sibilants, and nasals. Exceptions are 'Māgadhisms.'

³ Where we have *kh* in G., Shb., Mans., these are 'Māgadhisms' as is shown by the fact that in the dialects of the Dhauli, Jaugada, and Kālsī recensions, *kkh* (written *kh*, *kh* and not *kkh* of course initially) is the regular correspondent to Indic *kṣ*. Cf. Johansson, Shb. ii, p. 23. [According to Johansson, Bühler reads *saṃ[chi]tena* in ZDMG.; in EI. he reads *saṃkhitena*.] I may add that I reject Pischel's 'law' as Johansson and, I think, Bartholomae before me. As to whether Aryan *ṣh* is reflected by *jjh* in Middle-Indic languages, at present I am not able to judge.

rāñā, *rāño* (and not *-jin-*); *mayā* (written *maya* in Mans. and Shb.) as the inst. sing. of the 1st personal pronoun (and not *mamayā*); *ahaṃ* (and not *hakaṃ*) as the nom. sing. of the 1st personal pronoun; *y* (and not *h*) in the ending of the 1st person sing. of the optative (Shb. *vračheyam*, G. *gaccheyam*): *o*-conjugation of *karoti*, *prati* (not in Mans.), and not *paṭi*, corresponding to Skt. *prati* (see Michelson, IF. xxiii, pp. 240, 241).

In the American Journal of Philology I shall show that it is possible that the law in the dialect of the Shāhbāzgarhi and Mansehra versions that *ś* converts a following intervocalic *s* to *ś* is to be connected with the law that in the dialect of the Gīrnār redaction original *ś* (historical *s*) converts a following *st* to *śt*; it is also probable that Shb. Mans. *st* and G. *st* from Aryan *sth* are to be brought into correlation: observe the retention of the sibilant and the deaspiration in both cases, even if the final result is different. It is certain that in the dialects of all three recensions that Indic *sth* becomes *st*, but 'Māgadhisms' by chance take the place of the native sounds in the case of both the Shāhbāzgarhi and Mansehra versions.

It is more problematic if the law that in the dialect of the Gīrnār recension that original *ārś* and *ārśy* become *ās* (Michelson, IF. xxiv, pp. 53, 54) should in any way be united with the apparent law that in the dialect of Shb. and Mans. that *r* is assimilated to an immediately *ś* after *ā* (Michelson, AJP. xxx), as vowel quantities are not distinguished in the Kharoṣṭhī alphabet nor are geminations. If the two are to be brought into rapport with one another, the law would be as follows: *r* is assimilated to an immediately following *ś* in the combinations *ārś* and *ārśy* in the dialects of Shb. Mans. and G. becoming *āś(ś)* in the dialect of Shb. Mans., *ās* in the dialect of G.; original *ārś* remains in Shb. Mans.¹ but becomes *ās* in the dialect of G.

¹ Cases where the *r* is omitted are probably 'Māgadhisms.' Yet it is possible that the process which was completed in the case of *ārś*, was beginning to take place in the case of *ārś*, and hence the graphic fluctuation. The fact that *r* is assimilated before *ś* but not before other consonants in the dialect of Shb. and Mans., may be accounted for by the fact that *ś* as well as *r* is a lingual consonant: *r* would naturally be more readily assimilated to a consonant of its own class than other consonants. I call attention to the fact that in the American Journal of Philology I have shown that, contrary to the opinion of Johansson, *r* is not assimilated to immediately following dental stops in our dialect, nor are the dental stops converted to lingual stops by the influence of the preceding *r*.

**Special points of contact with the dialects of both the
Kālsī and Gīrnār redactions.**

These are but few in number. Examples are: the contraction of *ayi* to *e*¹ (Shb. Mans. *pujetaviya*, K. *pujetaviya*. G. *pūjetayā*, a blunder for **pūjetavyā*; Shb. *lekhaṣeṣāmi*, K. *lekhaṣeṣāmi*; Mans. *haṣeṣati*, Shb. [*haṣeṣati*], G. *hāṣeṣati*; Shb. [*vadhe*]śaṃti, *aṇapeśaṃti*; Shb. *aloceti*, G. *alocetpā*, Mans. *draṣeti*; Shb. *viṇetavi[ya]ṇ*, G. *vīṇetavyaṇ*; Shb. *prāṇivedetaro*, *patrivedetaro*,² G. *prāṇivedetavyaṇ*); the phonetic correspondent to Sanskrit *manuṣyā*-, Shb. Mans. *manuṣa*-, i. e. *manuṣṣa*-, G. *manusa*- i. e. *manuṣṣa*-, K. *manuṣa*-,³ i. e. *manuṣṣa*-; -*eyu* (and not *evu*) as the ending of the 3d person pl. of the optative active (Shb. *aratrapeyu*, *śruṇeyu*, Shb. Mans. *vaseyu*, *suśruṣeyu*, Mans. *śruṇey[u]*, Mans. *haveyu*, G. *vaseyu*, K. *ṣuṇeyu*, *ṣuṣuṣeyu*, *huveyu*, -*neyu* i. e. **haneyu*).

It is an acknowledged fact that in edicts i—ix, the dialect of the Kālsī recension is practically pure ‘Māgadhan.’ with but few traces of the native dialect. In edicts x—xiv the local dialect is prominent, but ‘Māgadhisms’ are not infrequent. It is probably due to this that we are unable to point out more special points of contact of the dialects of Shb., Mans., G., and K.

**Special points of contact with the dialect of the Kālsī
recension.**

For the reason stated above, few special points of contact can be shown, even if they existed. Examples are: the con-

¹ In Dh. and J. *ayi* is uncontracted; as also in the ‘Māgadhan’ portion of K. ‘Māgadhan’ *ayi* for *e* has forced itself into several words in Shb., Mans., and G. I consider that Johansson’s attempt to formulate a law determining under what circumstances *ayi* is retained and when contracted in the dialect of Shb. and Mans. (the dialect of G. is not treated) is a failure. In my judgement *ayi* phonetically contracts to *e* in the dialects of G., Shb., and Mans. under all circumstances. The fact that Shb. and Mans. are not always in agreement in the use of *ayi* and *e* distinctly points in this direction. For the principle involved, see Franke, Pāli and Sanskrit, p. 109.

² On Shb. *prāṇi* and *patrī*, see Michelson, IF. xxiii, pp. 240, 241.

³ This is the true native word. *Manuṣa*-. in the ‘Māgadhan’ portion is due to the influence of ‘Māgadhan’ *munisa*- which is also found in the ‘Māgadhan’ portion of K. This does not affect the fact that ‘Māgadhan’ *munisa*- itself is a contamination of **manuṣa*- and **pulisa*- (Michelson, IF. xxiii, p. 254 ff.).

traction of *aya* to *e* in the 3d sing. indicative and 3d pl. of the imperative of the causative¹ (Shb., Mans., K. *pujeti*, Shb. *pa[ʔr]ivedetu*,² Mans. *paṭivedetu*,² K. [*paṭi*]vedemtu, Shb. *rocetu*,² K. *locetu*,² Shb. Mans. *aradhetu*,² Shb. *aradheti*. Mans. *aradheti*, Shb. *vaḍheti*, Shb. *amuneti*); Shb. Mans. K. *kiti* from **kid* **iti* (Johansson, Shb. ii, p. 52); *imaṇ* (written also *ima* in Shb. and Mans.) as nom. acc. sing. neutre; *i* in the gen. sing. of Shb. Mans. *etisa*, K. *etiṣā* (as shown by Shb. *imisa* we should expect this in Mans. and the corresponding form in K., but 'Māgadhisms' have usurped the place of the native words).

Special points of contact with the dialects of the Dhauli, Jaugaḍa, and Kālsī (edicts i—ix) recensions.

It will probably always be a matter of dispute as to what are special points of contact between the dialect of the Shāhbāzgarhi and Mansehra redactions on the one hand and the dialects of the 'Māgadhan' versions on the other. For it is sometimes difficult to determine whether the seeming points of contact are not after all nothing more than 'Māgadhisms' in the Shāhbāzgarhi and Mansehra versions. In some cases absolute tests are wanting, and the matter becomes more or less subjective. For example, I am persuaded that gerunds in *tu*, the *iy* passive, the word *cu* 'but' in Shb. and Mans. are really 'Māgadhisms', and not special points of contact with the dialects of the 'Māgadhan' versions.³ I am confident that

¹ The contraction of *aya* in these forms is foreign to the dialects of the Gīrnār, Dhauli, and Jaugaḍa redactions of the Fourteen-Edicts. Hence where *aya* remains uncontracted in these forms in Shb. Mans. K., we can safely conclude that these cases are 'Māgadhisms.' (Exactly as where *ayi* remains uncontracted to *e* in the dialects of Shb., Mans., G., and K.) Johansson, Shb. i, p. 141, 142 (27 and 28 of the reprint) attempts to formulate a law determining under what circumstances *aya* phonetically remains or is contracted to *e*—successfully in my judgment, only he does not make use of the principle of 'Māgadhisms' in explaining the apparent exceptions. *Anuneti* included for convenience.

² 3d pl.; *m* graphically omitted.

³ For an argument in favor of holding such gerunds in *-tu* as occur in Shb. and Mans. to be 'Māgadhisms', see above p. 82. An argument to show that the *iy* passive in Shb. and Mans. is a 'Māgadhism' is that we should otherwise have to assume that *iyi* remained or was contracted to *ī* in both Shb. and Mans. under unknown conditions; whereas *iyi* remains in Dh., J., and K. Moreover the present passive in *iy* is the only present

the following are real points of contact and not 'Māgadhisms': the contraction of *ava* to *o* in the correspondents to Skt. *bhavati*, *bhavatu* (Mans., Shb. *bhoti*, Shb. *bhotu*; Dh. J. K. *hoti*, *hotu*); original vocalic *m̐* appears as *a*+*a* nasal (Shb. Mans. *atikraṃtaṃ*, Dh. J. K. *atikraṃtaṃ*); the initial *i* of *iti* is lost after immediately preceding vowels; the dat. sing. of *a*-stems ends in *-āye* (written *-aye* in Shb. and Mans.); the oblique cases in the sing. of *ā*-stems ends in *-āye*¹ (written *-aye* in Shb. and Mans.); *saṃtaṃ* as a nom. sing. of the present

passive found in the dialects of the Pillar-Edicts. The fact that Mans. *ara. isu* (i. e. *arabhisu*) corresponds to Shb. *a[rabh]i[yisu]* points in the same direction. 'Māgadhan' *s* for native *ṣ* should be observed in the termination of both words. Note too the Shb. passive *hamṇanti* (**hany-*) with active ending.—It should be noticed that *cu* (and not *tu*) alone is found in the Kālī redaction of the Fourteen-Edicts as well as the various recensions of the Pillar-Edicts. The *tu* of the Dhauli redaction of the Fourteen-Edicts then would be a trace of the true local vernacular (cf. above). — This does not make it possible to declare *cu* the phonetic equivalent of Skt. *tu*, as *t* before *u* remains in the dialect of the Delhi-Sivalik version of the Pillar-Edicts (cf. *tuthāyatanāni*, Skt. *tustyaṭatanāni*). On the etymology of *cu* see Michelson, IF. xxiii, p. 256 ff. I may add that I hold Shb. and Mans. *hida* to be a 'Māgadhism' also. Similarly Mans. *hidaṃ*, if not a pure blunder.

¹ Johansson's explanation of this form is wholly erroneous. As Pischel (see his Gr. d. Pkt.-Sprachen) rightly saw, *āye* corresponds phonetically to Sanskrit *āyāi*. For the use of *āye* (**āyāi*) as a gen. sing. no question will be raised. The use of *āye* as an inst. sing. is thus to be explained **iyās* and **iyā*, the gen. and inst. sing. of *i*-stems respectively phonetically fell together in **iyā*; likewise **uvās* and **uvā* of the *ū*-stems; after the syncretism of the gen. and dative, *iye* did duty as a gen. also: now as *iyā* had the function of both gen. and inst., *iye* was made to serve as an inst. Hence *āye* of *ā*-stems also was used as an inst. It would be possible to assume that *āye* simply levelled *ayā*. Another hypothesis that is also plausible is: the inst. *ayā* was levelled to *āyā* by influence of the gen. sing. *āyā* (**āyās*); so when *āye* came to be used as a gen., it also was used as an inst. As a matter of fact all the above forces may have played a part in bringing about the result.—The original loc. sing., whatever it may have been, was simply wiped out in favor of *āye*. For *āya* in the oblique cases of *ā*-stems in Pāli, and in the Gīrnār redaction of Fourteen-Edicts; as well as in the dialects of the Pillar-Edicts see my forth-coming essay on the dialect of the Gīrnār redaction. The dat. sing. of *a*-stems in *āye* is simply borrowed from the *ā*-stems. Pischel (see his Gr. d. Pkt.-Sprachen) already saw the possibility of this explanation, but rejected it on what appears to me insufficient grounds. Johansson's explanation is untenable as Pischel presumably saw. See also Michelson, IF. xxiii, p. 243.

participle (written *saṃta* once in Mans.); similarly Shb. Mans. *karaṇtaṃ* (written also *karataṃ* in both Shb. and Mans., *karata* in Shb.), Kālsī *kalaṇtaṃ* (written also *kalaṇta*, *kalata*); the optative *siyā* (written *siya* in Shb. and Mans.). It should also be noted that in these dialects the nom. sing. neutre of *a*-stems is frequently replaced by the nom. sing. masc. (Shb. -o, Dh., J., K. -e; in Mans. 'Māgadhan' -e replaces native -o). And the vocalism of *ucāvuca-* (written *ucavuca-* in Shb. and Mans.) in the dialects of J., Dh., and K. is deserving of mention in contrast with Gīrnār *ucāvaca-*. (Such is the reading of J. in ASSI.)

A Hymn to Tammuz (Cuneiform Texts from the British Museum, Tablet 15821, Plate 18) with translation and commentary by Professor J. DYNELEY PRINCE, Ph. D., Columbia University, New York.

Transliteration and Translation.

Obverse.

1. — — — — — — — *ama-mu-ra nu-un-ti*
(Lament) for my mighty one who liveth no more.
2. — — — — — — — *nu-un-ti ama-mu-ra nu-un-ti*
— — — — — who liveth no more, for my mighty one who liveth no more.
3. — — — — *mu-lu* — — — — *nu-un-ti ama-mu-ra nu-un-ti*
— — — — — who — — — — — liveth no more; for my mighty one who liveth no more.
4. — — — — — — — — *du mu-ud-na-mu nu-un-ti*
— — — — — — — — — my spouse who liveth no more.
5. — — — — — — — *mu mu nu-un-ti*
— — — — — — — my — — — — — who liveth no more.
6. — — — — — *dimmer gal mu-an-na nu-un-ti*
— — — — — great god of the heavenly year who liveth no more.
7. *ù-mu-un-e a-ra-li nu-un-ti*
Lord of the lower world who liveth no more.
8. *ù-mu-un-e sar-ra lamga ki nu-un-ti*
Lord of vegetation, artificer of the earth, who liveth no more.
9. *lax(?)ba en dimmer dumu-zi nu-un-ti*
The shepherd, the lord, the god Tammuz who liveth no more.
10. *ù-mu-un-e ba-ta(?)ba nu-un-ti*
The lord who giveth gifts who liveth no more.
11. *mu-ud-na-bi-ta (an-na)-ka nu-un-ti*
With his heavenly spouse he liveth no more.
13. — — — — — *mu-tin-na nu-un-ti*
(The producer of) wine who liveth no more.
14. — — — — — *lum-lum-ka na-àm-mal nu-un-ti*
Lord of fructification; the established one who liveth no more.

15. *ù-mu-un (gir)-ka na-àm-mal nu-un-ti*
The lord of power; the established one who liveth no more.
16. *gud kala-a-dim alam-ne-en dib (LU)-dib (LU)-bi ù-ša (Ù)-a-dim ne-tuš (KU)*
Like a mighty bull is his appearance; the forceful one, like an ancient bull he coucheth.
17. *gud kala-a-dim alam-ne-en mâ bir-bi ù-ša (Ù)-a-dim ne-tuš (KU).*
Like a mighty bull is his appearance; in his ship of plenty like an ancient bull he coucheth.
18. *me-e-zu(?) -da(?) LI ga-a-an-ma-kud*
In accordance with thy word(?) the earth shall be judged.
19. *su-gir-ma LI ga-a-an-ma-kud*
(Thus) the high parts of the earth verily shall be judged.
20. — — — — *mu-lu* — — — *me-a ga-a-an-ma-ab-gu (KA)*
— — — — — who — — — — verily they shall cry out for it.
21. [*šuku (PAD) nu*]-*kú-a-mu ga-a-an-ma-ab-gu (KA)*
For food which they have not to eat they shall verily cry out.
22. (*a*) *nu-nag-a-mu ga-a-an-ma-ab-gu (KA)*
For water which they have not to drink they shall verily cry out.
23. (*ki*)-*el šag-ga-mu ga-a-an-ma-ab-gu (KA)*
Verily the maiden who is pleasing shall cry out for it.
24. (*kala*) *šag-ga-mu ga-a-an-ma-ab-gu (KA)*
Verily the warrior who is acceptable shall cry out for it.
25. — — — — *a(?) -zu gir-e kur aš ba-šub (RU)*
— — — — — thy — — — — the mighty one, the land with a curse is destroyed.
26. — — — — — *gir-e kur aš ba-šub (RU)*
— — — — — the mighty one, the land with a curse is destroyed.

Reverse.

27. (*gir*) *kur-ra i-de ugun (DAR) nu ugun (DAR) kùr-e*
Power of the land (is he). With (his) gift no gift can vie.
28. (*gir*) *kur-rà gu (KA) xu-tu-ul-xu-tu-ul-e*
Power of the land (is he). The Word which overcometh disease.
29. *gir ù-mu-un-da ù-mu-un-da*
Power he exalteth, exalteth.

30. [*šuku* (PAD)] *nu-kà-a-mu ù-mu-un-da*
Food which they have not to eat he raiseth up.
31. *a nu-nag-a-mu ù-mu-un-da*
Water which they have not to drink he raiseth up.
32. *ki-el šag-ga-mu ù-mu-un-da*
The maiden who is pleasing he raiseth up.
33. *kala šag-ga-mu ù-mu-un-da*
The warrior who is acceptable he raiseth up.
34. *kala mu-lu-zu-ne mu-da-ab-xa-lam-ma*
The mighty one who destroyeth your people.
35. *dimmer ab-u tur mu-lu-zu-ne mu-da-ab-xa-lam-ma*
The god Ninib destroyeth even the least among your people.
36. *i-de-bar šag-ga-ni Nina nam-ba-e-bi-bi*
With her gracious aspect Ninâ speaketh.
37. *sar-bar šag-ga-ni xu-ub-na-an-ni-bar-ri*
In her gracious rising verily she shineth forth.
38. (*ki*) *àm-dirig-ga-na ur-ba kala(?) alam*
Where she waxeth full, her procreative power is mighty of aspect.
39. *mu-lu-mal PA gubu (KAB)-gub(DU)-bi-na šam-elteq-ga xu-ba-e-ku*
The creative one (with) the staff of her left hand, verily she establisheth the cleansing *uxulu*-herb.
40. *gi-sa (DI)-da-ni im-e-a-an-me*
With her sceptre of judgment she commandeth.
41. *mu-lu-mal li-du-ni im-mi-ir-ri-a-an-me*
The creative one with her firm voice she speaketh to him.
- XLI. *er-lim-ma dimmer dumu-zi-da*
XLI lines. A hymn for the god Tammuz.

Commentary.

The present hymn to Tammuz in Eme-sal is one of a series found in Cun. Texts from the British Museum, Vol. xv, plates 10ff. Of these Dr. F. A. Vanderburgh has published in his thesis "Sumerian Hymns" (Columbia University Press, 1908) Plates 10, 15—16, 17, 19 and also Plates 11—12 in the JAOS, 1908. I have published Plates 14, 22, and 23 in the AJSL, while Dr. Vanderburgh, who is at present preparing for publication Plates 7, 8, 9, and 13—12, has aided me with the present text by many valuable suggestions.

Obverse.

Line 1. *amu* = AM 'bull' I render 'mighty one.' Note that the god Ea is also called a bull in ii, 58, 52.

Line 3. *mu-ud-na* = *xâ'iru* 'spouse,' cf. Br. 1304. Here the bereaved Istar is probably speaking.

Line 6. *dimmer gal mu-an-na* 'great god of the year (lit. 'name') of heaven,' in contradistinction to the present condition of Tammuz as lord of the lower world *arali*, line 7, whither he had been transported, leaving the heavenly (or upper) year destitute of vegetation.

Line 8. *u-mu-un-e sar-ra* 'lord of (spring) vegetation.' Note that *sar* = SAR = *kirû* 'plantation,' Br. 4315 and see Prince, *Materials*, p. 283.

The mourning ceremonial for Tammuz took place just before the summer solstice which was followed by a season of rejoicing at his re-appearance. For this mourning-ceremonial which was evidently practised at Jerusalem in the time of Ezekiel, cf. Ezek. viii, 14:

יבא אתי אל פתח שער בית יהוה אשר אל הצפונה והנה שם הנשים
ישובות מבכות את תמוז:

Probably also in Zech. xii, 10, the words *מספר על היחיד* refer to the ritual lamentation for Tammuz.

lamga li; he was the artificer of the earth, because he was the cause of plant life especially. For *lamga*, cf. Prince *op. cit.* 221.

Line 9. *lax(?) -ba*. Although the first sign is obscure, it is most probably *lax* of the combination *lax-ba* = *re'u* 'shepherd,' IV, 27, 1a.

The Sumerian form *dumu-zi* 'son of life,' i. e., 'life itself' = the god of life *par excellence*, is clearly the original of the Semitic corrupted name of this god *Tammuz*, which appears also as the name of the fourth month. Note the fuller form *dumu-zi-da* in line 42, showing that the full form of the word for 'life' in Sumerian was *zid*.

Line 10. *ba-ta(?) -ba*. This seems clearly *ba* verbal prefix + the locative infix *-ta-* + the root *ba* = BA = *qâšu* 'give, bestow,' Br. 107.

Line 13. I assume that some word meaning 'producer,' i. e. 'of wine' has been erased here.

Note the ES. form *mu-tin-na* for *geš-tin*. See Prince, *op. cit.*, p. 247 = *karânu* 'wine.'

Line 14. On *lum* = LUM, see Prince, *op. cit.*, p. 227.

na-ám-mal seems to consist of the abstract prefix *nam-* + *mal* = GA = *šakānu*, Prince, p. 231.

Line 15. This line evidently contains *gir-emûqu* 'power,' Br. 9184 + the genitive suffix *-ka*.

Line 16. The second sign here must clearly be read *kala* owing to the following vowel of prolongation *-a*, and not *lig*, as is frequently the case. The suffix I read *dim* and not *gim*, as the hymn is in ES.

On *alam*, see Prince, 29. This is not a certain reading for the sign ÇALAM. Note that Hrozný reads this sign with value *alana*, probably associating it with Sem. *lānu* 'appearance,' Br. 7299, which seems to be its meaning here.

The suffix *ne-en* seems to consist of the demonstrative element *ne-* + the verbal *-en*, seen in *mên* 'to be.'

Note that the combination *dib* (LU)-*dib* (LU)-*bi* has the meanings *šitpûru*, Br. 10740; *šitbuçu*, Br. 10741; and *šitmarru*, Br. 10742. Hence my translation.

û-ša(Û)-a-dim consists of *ša* = Û = *labîru* 'ancient,' Br. 9465, + the prolonging vowel *-a* + the suffix *dim* (GIM) = 'like unto.'

tuš (KU) = *ašābu* 'sit, dwell,' Br. 10523. The god is conceived of as sitting, i. e., couching like a powerful bull resting. The couchant attitude is no doubt suggested by the fact that the god's power is temporarily *at rest* in the lower world.

Line 17. *má* = *elippu* 'ship,' Br. 3683. This is his ritual ship of state or wealth; *bir* = *çibtu* 'wealth,' Br. 2029, probably referring to the ceremonial of carrying the image of a god in a small symbolical ship.

Line 18. *me-e-zu(?) -du* 'in accordance with thy word;' *me* = *qûlu* 'utterance,' Br. 10370. LI means *erçitu* 'earth,' Br. 1104; perhaps this is correct here in connection with the verb-root *tar-kud* = *dānu* 'judge,' Br. 364. The prefix *gu* although pre-cative properly, I render here as 'shall,' expressive of the singer's hope and thus also in the following lines.

Line 19. *su-gir* I render as 'highlands'; see Br. 233 = *Elam-tu* = *ma* = *mātu* 'land,' Prince, 228. This combination seems to be in genitive apposition to the following LI = *erçitu* (see just above on line 18).

Line 20. *me-a* here is perhaps the cognate accusative of *gu* (KA) and means 'they cry a crying' = 'they cry lustily for it.'

Line 21. *šku* (PAD) = *kurmatu* 'food,' Br. 9929. In *nu-kū-a-mu*, *kū* = *akālu* 'eat,' Br. 882, *passim*. I supply this mutilated line from kindred passages. Note also below line 30.

Line 22. Note the parallelism here with line 21. *naḡ* = *šatū* 'drink,' Prince 251.

Line 23. *ki-el* = *urdatu* 'maid-servant.' For full discussion, see Prince 204. In *šag-ga-mu*, *šag* = *damqu*, Br. 7291 + the relative suffix *-mu*, in this case probably not the *-mu* of the first person, but the indeterminative relative possessive *-mu* discussed Prince, p. XXI.

Line 25. *aš* = *arratu* 'curse,' see Prince, 41. *šub* (RÜ) = *ma-qātu* 'overwhelm,' Br. 1432. Literally: 'the land he overwhelmed (with) a curse.' I render it passively "is destroyed" here, because the curse is negative on the part of Tammuz, consisting in his absence.

Reverse.

Line 27. The first sign here must be *gir* = *emūqu* 'power' fully discussed, Prince, 149. (*gir*) *kur-ru* seems to me to be an epithet of the god. *i-de* I take as prepositional; cf. Br. 4005: *mazar*; here = 'before' or 'in comparison with.' *ugun* (DAR) = the abstract prefix *u-* + *gun* = *biltu* 'gift, tribute.' See Prince, 341. In the last part of the line *pap* must be = *nakāru*; here = 'vie with,' Br. 1143.

Line 28. *xu-tu-ul xu-tu-ul-e* by repetition means 'to overcome disease thoroughly.' Note *xutul* = *xatū ša mur'i*, Br. 2056: 'overcome disease.' Here Tammuz is the life giving Word, a conception which has many parallels in early Semitic literature and which culminated in the Word of the Gospel of St. John.

Line 29. I must regard *-du* here as a verb = *našū* 'lift up;' see Br. 6654 = *šaḡū* 'be lofty.'

Lines 30—33 incl. are parallel with lines 21—24 incl. above.

Line 34. The suffix *-zu-ne* ought to mean "your people" (*mulu* = *nišū*, Br. 1339). See Prince, p. XXIII § 10 on *-zu-ne* which can sometimes but incorrectly mean 'their.' *xa-lam-ma* must signify 'destroy'; see Br. 11850: *xa-lam* = *xulluqu* 'destroy.'

Line 35. The god *ab-u* = *Ninib*, Br. 3836.

Line 36. *i-de* = *naphusu* 'look, aspect,' Br. 4010. *bar* = *namāru* 'shine forth,' Br. 1775. *i-de-bar* is a combination which means 'aspect' in this connection. *šag* = *damqu* 'gracious,' Br. 7291. *nam-ba-e-bi-bi*; the prefix *nam* is not necessarily negative; cf.

Prince, p. XXIX § 34: it merely serves here to strengthen the ordinary *ba*-prefix. *bi-bi* = *qibû* 'speak', Prince, 57.

Line 37. *sar* = *nîpxu* 'rising,' as of the sun or a planet, DW 474. *sar-bar* is a synonym or a parallel of *i-de-bar* of the preceding line. I render the precative force of *xu-* in *xu-ub-nani-bar-ri* as 'verily she shineth forth,' note that *bar* = *namâru* 'shine forth,' Br. 1775. *pitû* 'open out,' Br. 1791.

Line 38. (*kî*) really = 'place,' here probably = 'where, wherever.' *âm-dirig* = 'fullness,' with abstract prefix *âm* + *dirig* 'be full,' Prince, 81. I render *ur-* here as *lultu* 'procreative power,' Br. 11258 + the 3 p. suffix *-ba*. The sign after BA is probably *lig* or *kala*, as it seems to be pronounced in this hymn (note above line 16 LIG *-a* = *kala-a*). *kala*(?) + *alam* must mean 'mighty of aspect.'

Line 39. *mu-lu-mal* 'she who' (relative *mulu*) + *mal* = *šakânu* 'establish, make,' Br. 5421. This must be an epithet applied to Ninâ. PA can only indicate the goddess's sceptre of power; Br. 5573: *xatû* 'sceptre, staff.' *kab* = *gubu* = *šumêlu* 'left hand,' Br. 2684. I believe that DU = *gub* is a gloss giving the reading of KAB = *gub(u)*. *šam-nag-ga*; this *nag* = *elteq* = *uxulu* 'a cleansing plant like a soap,' DW. 43; the prefix *šam* = U is the determinative for 'plant.' *ku* here must = *nadû* 'put in a specified place,' Br. 10 542.

Line 40. In *gi-sa* (DI)-*dan-ni*, *gi* = 'reed,' Prince. 138; *sa* (DI) = *mîlku* 'counsel, judgment,' Br. 9531; *da* is probably the infix postposition before the suffix *-ni* 'her.' *me* = *qâlu* 'speak,' Br. 10361.

Line 41. *li-du* appears in *li-du an-nu* = *elîtum ša zamâri* 'high voice in singing.' It is probable that LI was pronounced *ngu(b)*, a cognate of *me* = *qâlu* 'speak.' *du* in *li-du* = *kânu* 'firm,' Br. 4884. In *im-mi-ir-ri-a-an-me*, 'unto him' is contained in the *-r-* element.

It should be noted that in lines 36—41 the goddess Ninâ, the consort of Tammuz, is represented as being the revivifying power acting against the destructive force of Ninib. Ninâ is thus associated with Tammuz in this hymn as a life-giver after the winter solstice. While she and Tammuz are away, all vegetation ceases.

Line 41. *er-lim-ma*; the second syllable is really *lib*, probably pronounced *lim* in conjunction with the following *-ma*.

Another Fragment of the Etana Myth.—By MORRIS
JASTROW jr.

I.

By a fortunate chance the Berkshire Athenaeum of Pittsfield Mass. has come into possession of one of the tablets of Ashurbanapal's library.¹ Like the other specimens known to exist in this country,² this one also was brought to this country by the Rev. Dr. W. F. Williams, who, being at Mosul while Layard was conducting his excavations in the region, obtained some tablets from native Arabs. Three fragments are now in the possession of Dr. Talcott Williams of Philadelphia (son of Rev. Dr. Williams), a fourth after passing through several hands came into the hands of Mr. George Harding, a Trustee of the Berkshire Athenaeum who about two years ago presented it to the institution. My attention was called to it during a visit to Pittsfield, and I wish to express my obligations to Mr. H. H. Ballard, the curator of the Athenaeum who kindly placed the very interesting specimen at my disposal for study and copying. It measures $8\frac{1}{2} \times 10$ cm. and contains parts of 31 lines on the obverse and parts of 24 lines on the reverse together with a colophon showing parts of 6 lines. By comparison with similar colophons, the one on our text can be completed, adding about 3 more lines. Completing the tablet in this way, we are enabled to estimate the number of lines missing at the top of the obverse at about 9 lines. How many lines are missing at the bottom of the obverse and at the top of the reverse, it would, of course, be difficult to say,

¹ Discovered at Kouyunjik by Layard (1849). See Jastrow, *Did the Babylonian Temples have Libraries* (PAOS. XXVII, 147 seq.) and Bezold's Introduction to his *Catalogue of the Cuneiform Tablets in the Kouyunjik Collection* etc. (Vol. 5).

² Two have been published by me (1) "A Fragment of the Babylonian Dibbara Epic" (Phil. 1891) and (2) "A New Fragment of the Etana Legend" (*Beiträge zur Assyriologie*, Bd. III, pp. 363—383).

but from the comparison of this fragment with the twelve others known to us and a study of the various editions of the text that they represent, the conclusion may be reached that the obverse of our fragment covered about 70 lines and the reverse about 54.¹ The tablet when received contained considerable incrustation. Thanks to careful treatment at the Chemical Department of the University of Pennsylvania (for which I am under obligations to my colleague Prof. E. F. Smith and to his assistant Mr. Wallace) and to a thorough soaking of the tablet in water, many lines or individual characters that were at first obscured became entirely legible, or sufficiently so as to enable me to practically make out all of the tablet that has been preserved. Conjectural restorations are indicated in the transliteration and translation by being placed within brackets. The clay of the tablet is of the reddish color that is characteristic of so many of the tablets of Ashurbanapal's collection. The characters are carefully written but often difficult to read especially in the crowded portions. An interesting feature is the small double wedge frequently appearing in some of the lines,² indicating that in the copy from which our tablet was copied a line ended at the mark in question. The bearing of this feature on the interpretation will be shown further on. As to the holes evidently inserted into the clay *before* the characters were inscribed, scholars still waver between the supposition that they were made to protect the tablet from cracking in the course of baking, or as receptacles for wooden pegs on which the tablet rested while the one side was being inscribed. Probably neither supposition is correct. Tablets can be burned without air holes—witness the large historical clay cylinders and the business documents—and the attempt to steady the tablet by means of pegs at the places indicated by the holes would hardly prove very effective. The holes are both too close together and too irregularly distributed to make this supposition a plausible one. I have sometimes thought that they were inserted as a kind of guide to the scribe in copying his tablet, but this thesis also encounters objections.

¹ The colophon takes up 9 lines and these being more widely spaced, the reverse contains fewer lines than the obverse. See below pp. 113—123.

² On the reverse ll. 3. 12. 16. 17. 19. 20. 21. 22.

That the tablet belongs to the Etana myth follows from the colophon and is confirmed by the context. It is therefore a curious chance that two of the four fragments of the royal library that found their way to this country should form parts of one and the same series.

II.

The fragment reads as follows:¹

Transliteration.

Obverse

[about 9 lines wanting].

1. [it-ti(?)ka — — — — ru-'a-u-[tu]²
[lu] it-ba-ru a-[-na-ku]
[erû] pa-su i-pu-šam-ma [a-na širi izakkar]
— — — — — ša ru-'a-u-tu — — — —
5. [lim-ni-ta]³ma kab-[ta-ti nu-u-ri-is]⁴
il [GAL-la]⁵ ša ilâni [a-šak-ku ni-kul-ma]⁶
al-ka(?)⁷ ni-zaḫ-pa-am-ma — — — —
ni-it-ma-a iršitim — — — —
ina ma'ar (il) Šamaš ku-ra-di ma-mit it-[mu-u]
10. [ša] i-ta-a ša (il) Šamaš [it-ti-ku]
(il) Šamaš lim-niš ina ḫa-at ma-ḫi-ši [limahḫiṣ(?)⁸

¹ Restored portions and conjectural readings in brackets.

² A variant writing to ru-'u-tu. Cf. Muss-Arnolt, *Assyr. Dictionary*, p. 941^a, where it is used of the friendship between ox and horse.

³ Restored according to rev. l. 8. Traces of *lim* and *ta* are discernible.

⁴ Restoration likewise based on rev. line 8 only that—since it is Shamash who is bringing the charge against the eagle,—rev. l. 8 reads *tu-u-ri*, whereas here where the eagle and serpent are forming a plan, we must read *nu-u-ri*, corresponding to the verbs in ll. 7—8 which are in the first person plural.

⁵ Traces discernible. Cf. rev. l. 9.

⁶ Restored according to rev. l. 9 but *nikul* again instead of *takul*.

⁷ The first sign can hardly be anything else than *al*, though Geštin (Brünnow Nr. 5004) is possible. The second sign is very puzzling. I have settled upon *ka* as the most likely, though it looks as though the scribe had started to write a different sign—perhaps *Šun* (Brünnow Nr. 250).

⁸ Compare for lines 10—11, the parallel in the other fragment of the Etana myth published by me obv. l. 13 (*Beiträge zur Assyr. III*, p. 364), where we can now restore after *ḫa-at* the word *ma-ḫi-ši* and which on the other hand enables us to restore the end of ll. 10 and 12 of our text. Note also that in the other fragment ll. 10—11 appear as one line,

- ša i-ta-a ša (il) Šamaš [it-ti-ku]
 li-is-su-šu-ma ni-ri — — —
 kak-ku mur-tap-pi-du ēli-šu — —
15. giš-par-ru ma-mit (il) Šamaš lib-bal-ki-tu-šu-ma [li-bar-ru-šu]¹
 iš-tu ma-mit [(il) Šamaš] it-mu-u iršitim — —
 iz-zaḫ-pu-nim-ma ša-da-a e-lu-[u ur-ḫa e-te-ḫu-u]
 ūmu I (kam) ta-a ili i-na-ša-ru[-u]²
 alpu rimu pu-ri-mu erû³ i-bar-ram-[ma]
20. širu ik-kal i-ni-'i-u ik-ka-lu mârê [širi(?)]
 ar-mi šabitê širu i-bar-ram-[ma]
 erû ik-kal i-ni-'i-u ik-ka-lu mârê [erî(?)]
 sa-ap-pa-ri di-da-ni erû i-bar-ram-[ma]
 širu ik-kal i-ni-'i-u ik-ka-lu mârê [širi(?)]
25. — — — ḫaḫ-ḫa-ri širu i-bar-ram-ma
 [erû ik-kal i-ni-'i-u ik-ka-lu mârê [erî(?)]
 [erû ir-bi ak-]kul-li mârê erî ir-bu-u i-ši-ti
 [ištu mârê erî] ir-bu-u i-ši-ti
 [ištu mârê erî]⁴ li-mut-tu ik-pu-du-ma
30. [erû lib-ba-]šū li-mut-tu
 [ik-pu-ud-ma a-na a-ka-li ad-mi ša ru'a]⁶šū iš-kun
 [number of lines lacking about 30].

Reverse.

[number of lines lacking about 30].

— — — — — — — — — ri — — —
 — — — — — — — — — i i-pu(?) — — —

though with the indication that in the text from which it was copied there were two lines as in our text. The word *limût* is of course conjectural but some such word must have stood there.

¹ Parallel line in the other fragment obv. 12 which suggests the restoration at the close.

² Cf. the phrase *la na-sir mamit ilâni rabûti* (VR. 8, 67).

³ So the compound ideograph Id-Ḫu is to be read and not *našru*, as is shown by the phonetic writing *e-ru-u* in the fragment published by Scheil (*Rec. des Travaux*, xxiii, p. 21; rev. ll. 2 and 4). This is confirmed by [e]-*ru-u* in the fragment K. 1547 rev. 20 (*Beiträge zur Assyriologie*, ii, p. 445) which in turn corresponds to rev. 21^a of our fragment where the ideographic writing Id-Ḫu occurs.

⁴ Restoration suggested by the other fragment obv. 2 which itself may now be restored as follows: *ištu mârê erî [li-mut-tu ik-pu-du-ma]*.

⁵ The restoration [lib-ba-]šū is quite certain. Traces of *ba* discernible. Cf. the other fragment obv. 3 where no doubt *limuttu* is to be added.

⁶ Restored according to the other fragment obv. 5.

— — — — — [u-mi-]šam-ma im-tu-na-ḥa-[ra (il) Šamaš]
[i-na] šu-ut-ta-ti a-ma-ta-ma man-nu i-di-ki i-šak-na tuš-še
arad-ka

5. [ia-]a-ši erû bul-liṭ-an-ni-ma
[a-na] u-mi da-ru-u-ti zi-kir-kalu-uš-te eš-me
(il) Šamaš pa-šu epuš-mu a-na erî i-zak-kar-[šu]
lim-ni-ta-ma kab-ta-ti tu-u-ri-is
(il) GAL-la ša ilâni a-šak-ku ta-kul
10. ta-ma-ta-a-ma la a-sa-an-ni ḫa-aḫ-ḫa-[ri]¹
a-lik a-me-la ša a-šap-pa-rak-ka ḫat-ka li-iš-[bat]
(il) E-ta-na u-mi-šam-ma im-ta-aḫ-ḫa-ra (il) Šamaš
ta-kul (il) Šamaš ku-bur šu-'e-a iršitim² mithar-ti³ i-da-am
az-li-[ia]
ilâni u-kab-bit e-dim-ma ap-kiid
15. ig-dam-ra maš-šak-ki-ia (ŠAL)EN-ME-LI (meš)
az-li-ia ina tu-ub-bu-ḫi⁴ ilâni ig-dam-[ru-]
be-lum ina pi-i-ka li-ša-am-ma id-nam-ma šam-ma ša a-[la-di]
kul-li-man-ni-ma šam-ma ša a-tu-di bil-ti u-sul-ma šu[-ma
šuk-na-an-ni]⁵
(il) Šamaš pa-šu i-pu-uš-ma a-na (il) E-ta-na i-zak-[kar-šu]
20. a-lik ur-ḫa e-ti-iḫ šad-a a-mur šu-ut-ta-tum ki-[rib-ša bi-ri]⁶
ina lib-bi-ša na-di erû u-kal-lim-ka šam-[ma šu a-la-di]
a-na zi-kir (il) Šamaš ḫu-ra-di (il) E-ta-na il-lik [ur-ḫa e-ti-iḫ
šad-a]
i-mur-ma šu-ut-ta-tum ki-rib-ša ib-ri ina lib-[bi-ša na-di erû]⁷
ul-la-nu-um-ma ul-taḫ-ḫa-aš-[šu]⁸

¹ From this line on to the middle of l. 21 we have a duplicate in Harper's 2d fragment, *Beiträge zur Assyriologie*, II, p. 394 (K. 1547 Rev.). Lines 5 to 10 of this fragment may now be restored according to our text.

² The reading confirmed by *ir-si-[ti]* in Harper's fragment l. 9. Note that line 13 of our text covers two lines in Harper's fragment (ll. 8—9).

³ Brünnow Nr. 11261 or perhaps *rapašti* as Harper restores (ib. p. 392, line 10).

⁴ Correct Harper's reading accordingly. Cf. IV R² 20 Nr. 1, 27 *az-ḫu tu-ub-bu-ḫu*.

⁵ Restored according to the duplicate l. 16.

⁶ Restoration based on l. 23.

⁷ According to l. 21.

⁸ See the line before the colophon to K 2606 rev.—parallel to our text [ul-]la-nu-um-ma uš-ta-ḫa-aš-šu. Correct Harper's reading of the line accordingly. For *ullanum* in the sense of "recently just now," see e. g. Virolleaud, *L'Astrologie Chaldéenne*, Sin Nr. III, 4; xviii, 29 etc.

Colophon.

25. *erû pa-šu i-pu-šam-ma ana (il) Šamaš beli-šu [i-zak-kar]
 duppu II (kam) ala i-ši tum(?) — — —
 êkal Ašur-ban-apal šar [kiššati šar mât Ašur(ki)].¹
 ša (il) Nabu (il) Tāš-me-tum uz-nu ra-[pa-aš-tum išruḫû-šu]
 i-ḫu-uz-zu ênâ na-mir-tum [ni-siḫ dup-šar-ru-ti]*
30. *ša ina šarrâni a-liḫ maḫ-ri-ia [mimmu šip-ru šu-a-tu la
 i-ḫu-uz-zu]
 [ni-me-ki (il) Nabu ti-kip sa-an-tak-ki ma-la ba-aš-mu
 ina duppâni aš-tur as-niḫ ab-ri-e-ma
 a-na ta-mar-ti ši-ta-as-si-ia ki-rib ekal-ia u-kin].*

Translation.

[Obverse.]

1. [Let us form(?)] friendship [you and I(?)]²
 Verily, a friend I [to thee will be(?)]
 [The eagle(?)]³ opened his mouth and [to the serpent(?)
 spoke],
 [An agreement(?)] of friendship [let us make(?)],
5. The wicked and mighty(?) let us crush(?)⁴,
 [The *gallu*]⁵ of the gods, [the *ašakku* let us destroy],

¹ Restored according to II R 21, 26–34; 33; 38; IV R² 55 etc. etc.

² While the restorations in this and in the 4th line are of course purely conjectural, it is evident that the serpent and eagle are proposing to form an alliance.

³ Room for two signs—hence the suggestion to read *ID-HU*, though of course it is possible that the serpent is addressing the eagle.

⁴ *nu-u-ri-is* (like *tu-u-ri-is* rev. 8) from *arâsu*(?), perhaps related to *rêsu* (Muss-Arnolt, *Assyr. Dict.*, p. 104^b) like *arašu* to *rêšu*. One is naturally inclined at first to take *limnita* and *kabtati* as permansives “evil and wicked art thou” but there are various obstacles in the way. One should expect *kabtata* as in the 4th tablet of the Creation Story l. 3. To denounce one as “evil and mighty” would be a strange combination. I prefer to take both words as descriptive epithets. The force of the *ma* which as the combining element outside of verbs is not infrequent in divination texts (see e. g. IV R² 34 Nr. 1, obv. 4) seems to be that of conveying a compound term “powerfully wicked” or “wickedly powerful.”

⁵ The addition of *la* to *Nun* points to the reading *gallu* and I have no hesitation in identifying this with the well-known designation of a particular demon, for which, to be sure, the ordinary ideographic designation is *Te-Lal* (Brünnow Nr. 7732) but which is also written phonetically *gal-lu-u* and *gal-lu*. See Muss-Arnolt, *Assyr. Dict.*, p. 217^a. The juxtaposition with the demon *ašakku* leaves no doubt as to the identification.

— — let us set up — — —

Let us lay a ban on the earth — —

In the presence of Shamash, the warrior, the ban they laid.

10. Whoever [transgresses] the bounds of Shamash,
May Shamash grievously through the destroyer¹ [cut off]!
Whoever [transgresses] the bounds of Shamash,
May he remove him and — — —
May the overpowering weapon [fall] on him — —

15. May the sling, the ban of Shamash hit him [and catch him]!
When they had laid the ban [of Shamash] on the earth — —
. They set up, they ascended the mountain [they took the
road(?)].

For one day they kept the charm² of the god.

An ox, a wild ox, a wild ass, the eagle caught,

20. The serpent ate,³ drew back, the young [of the serpent(?)] ate.
A mountain goat, gazelles, the serpent caught,
The eagle ate, drew back, the young [of the eagle(?)] ate.
A wild mountain gazelle,⁴ a *didanu*,⁵ the eagle caught,
The serpent ate, drew back, the young [of the serpent(?)]
ate.

25. — — — of the ground⁶ the serpent caught,
[The eagle ate, drew back], the young [of the eagle(?)] ate.

¹ For *mahiṣu* in the sense here taken it is sufficient to refer to the passage in the hymn to Shamash ZA. IV, p. 31, col. III, 29 where the word appears in juxtaposition with *mu-tir-ru būli* "destroyer of cattle."

² Instead of *ta-a* one is tempted in view of the preceding lines to read *i-ta-a*, the accidental omission of the *i* being due to its resemblance to the preceding *kam*. However, *tû* as a synonym of *mamîtu* is no doubt correct.

³ The reading *ik-rib* "drew near" is of course possible here and in the succeeding lines, but in view of *ik-ka-lu*, the preference is to be given to *ik-kal*, just as in the Deluge myth (Gilgames XI, 155) *ik-kal i-ša-aḥ-ḥi* "ate and went away" which is a partial parallel to our passage. Cf. Muss-Arnolt, *Assyr. Dict.*, p. 34^b. Whether at the end of the line we are to restore *erû* or *širu* is also open to question, though the general sense is not affected whichever reading we adopt.

⁴ Cf. II R 6, 6d. Our passage fixes the correct reading of the term with an *s* and not *šap-pa-ru* as has been hitherto assumed. Delitzsch in his *Assyrische Tiernamen*, p. 48 read correctly *sapparu*, but his comparison of a very doubtful Arabic term شفر "young gazelle" is not acceptable.

⁵ Or *di-ta-nu* as II R 6, 7^d.

⁶ It is tempting to restore *šaḥ kaḫḫari* in view of II R 24 Nr. 1 rev. 19, but the traces do not favor this.

- [When the eagle stirred up] tribulation(?),¹ the young of the eagle raised an uproar.²
 [When the young of the eagle] raised an uproar,
 [When the young of the eagle] planned evil,
 30. [The eagle directed his heart] in evil design.
 [To eat the young of his friend] he determined.³
- — — — —

[Reverse.]

- — — — — [the eagle] daily faced Shamash.
 [In] the hole I will die and he who stirred up, should settle
 the strife⁴ of thy servant.
 5. Me the eagle let me live and
 Eternally, I will glorify thy name.
 Shamash opened his mouth and spoke to the eagle.
 The wicked and mighty one didst thou carry off.
 The powerful one of the gods, the *ašakku* didst thou consume.
 10. Therefore thou shouldst die⁵ and to the unseen(?)⁶ land
 Go! The man whom I shall send to thee may he seize
 hold of thee.⁷
 Etana daily faced Shamash,⁸

¹ The reading *ak-kul-li* is suggested by the following *ištu*.

² Cf. *e-ši-ti mātī* (I R 40 col. IV, 36) by the side of *ešitu* and *i-ši-tu* (see Jastrow, *Religion Babyl. u. Assy.*, I, p. 480 note 12 and II, p. 54 note 7). The general sense is "uproar." "Geschrei" as I rendered it II, p. 54, is perhaps better than "Vernichtung" (I, p. 480), though destruction is also involved.

³ While the restorations in these lines are again purely conjectural, the general context has, I think, been correctly caught with the help of the fragment above (p. 103, note 8) referred to.

⁴ For *tuš-še* in connection with *dikū* see the Hammurabi Code col. VIII, 2 *tu-uš-sa-am-ma id-ki*. The contrast to *dikū* would naturally be *šakānu*.

⁵ The emphatic form *ta-ma-ta-a-ma* conveys the force of deserving death; it is a threat rather than a mere assertion.

⁶ *asannu* is a new word and evidently a description of the dwelling-place of the dead. One is reminded of the *a-šar la a-ri* "unseen place" in the incantation IV R² 16, 47^a which, as l. 51 *a-šar la a-ši-e* shows, refers to the nether world.

⁷ Evidently in the sense of furnishing assistance, as in the passages quoted by Muss-Arnolt, *Assyr. Dict.*, p. 861^a.

⁸ The phrase implies an appeal to the god (as above l. 3)—making the direct statement that Etana opened his mouth etc. superfluous.

Thou hast consumed, o Shamash, the strength(?) of my sheep,
in the whole earth the young(?) of my lambs.¹

The gods I have honored, the shades, I have regarded,

15. The priestesses² have put an end³ to my offerings.⁴

My lambs through slaughter⁵ the gods have put an
end to.

O lord! By thy command may some one go out and give
me the plant of birth!

Show me the plant of birth, tear out the fruit⁶ and [grant
me] an offspring!

Shamash opened his mouth and spoke to Etana.

20. Take the road, pass to the mountain, seek out the hole,
[look] within it.

Wherein the eagle has been thrown, I will show thee the
plant [of birth].

¹ A difficult line. The parallelism with *az-li-ia* leaves no doubt as to the force of *šu-e-a*. In the Gilgameš epic, *ku-bur* (VI, 123, 147, 188) written as in our passage, occurs in connection with the "horns" and "tail" of the divine bull, and the general sense of "strength" fits the context. The "strength of my sheep" would be equivalent to "my strong sheep." As a parallel to this, I am inclined to take *i-da-am az-li-ia*, connecting the former with *admu* "offspring". Naturally, this is merely offered as a suggestion. To take *idâm* as a verbal form from *da'amu* "dark" gives no good sense. Shamash being addressed could not be the subject, as little as *iršitum* which is feminine. If my interpretation is correct, *idâm* as a parallel to *kubur* would have more specifically the force of "vigorous." Is this perhaps the underlying sense of the stem *adâmu* from which we get *admu* in Assyrian "young, vigorous" and אָדָם in Hebrew, —parallel to *vir* "the strong one" as the designation of "man"—by the side of the other word for man among the Semites إنسان etc. = Assyrian *enšu*, *nišê*, *tenišêti* etc. as the "weak" one?

² Our text shows that "priestesses" are introduced—not priests as Harper assumed—hence the feminine plural *igdamrâ*. The syllabary V R 13 rev. 49 is, accordingly, to be restored [*Šul En*]-*Me-Li* = *ša-il-tu*. In the text IV R 60* B obv. 7 we have the masculine equivalent with *maššaku* as in our case. See Jastrow, *A Babylonian Parallel to the Story of Job* (*Journal of Bibl. Literature*, XXV, p. 159 notes 84—85).

³ *igdamra* I take in the sense of "destroy" as implying the rejection of the offerings. IV R 60* C rev. 99 *šahātu* "destroy" is employed in the same way.

⁴ *maš-šak-ki-ia*. Cf. Jastrow ib. note 85.

⁵ Not as a sacrifice but as an actual destruction.

⁶ *biltu* I take as a reference to the tearing out of the plant—not to the birth of a child as Harper assumed.

On the order of Shamash the warrior Etana took [the road
passed to the mountain],
Sought out the hole, looked within it, [wherein the eagle
was cast],
(Where) recently he had been left to perish.¹

Colophon.

25. The eagle opened his mouth and to Shamash his lord [spoke].
2nd tablet of the series *ala i-ši tum* (?) — — —
Palace of Ašurbanapal, king [of the universe, king of
Assyria],
Whom Nebo and Tašmit [have granted wide] understanding,
Endowed with clear vision [for the glorious art of writing]²,
30. Whereas among the kings before me [none had acquired
that art].
[The wisdom of Nebo, the grouping(?)]³ of all extant col-
lections(?]⁴,
On tablets I wrote, compiled and revised, to be seen and
to be read in my palace I placed.⁵

¹ II, 1 from *šakāšu*.

² *nišik dupšarruti* is to be taken as a compound term "writing-art" and to be connected directly with the preceding *ēna namirtum*. The latter phrase might be rendered "clear insight." To separate *nišik dupšarruti* from what precedes as Myhrman does (*ZA*, XVI, p. 167), following Delitzsch, *Assyr. Wörterbuch*, p. 293, is to lose the force of the whole line.

³ *ti-ki-pi*—for which Delitzsch's explanation (*Assyr. Thiernamen*, p. 8), connecting it with talmudic תכף "join" still seems to be the most satisfactory. Cf. also II R 49, Nr. 1 obv. 13 and III R 57, Nr. 6, 52 seven *ti-ik-pi* stars = seven "joined" stars.

⁴ *santakku* is certainly to be derived from *satāku* with inserted *n*, as the variant *sa-tak-ki* (V R 51, col IV, 55) shows. My suggestion for *santakku* is based on the circumstance that the ideograph for the word is the sign *Tiš* (Meissner, Nr. 7563) in S. A. Smith, *Keilschrifttexte Ašurbanipals*, I, p. 112, 15 = V R 13 and elsewhere (see Muss-Arnolt, *Assyr. Dict.*, p. 787^b) in the phrase *šabē santakkika* = "thy collected troops."

⁵ It is of course possible that the colophon contained several additional lines like IV R² 56 and V R 51. A collection of all the various colophons and a careful renewed study of them is much to be desired, as a supplement to Delitzsch's discussion in his *Assyrische Thiernamen*, pp. 6–11 and in the *Assyr. Wörterbuch*, pp. 293–294. Such a study would show that the various classes of texts had distinctive colophons. See Jastrow, *Religion Babyloniens und Assyriens*, II, p. 226 note 1 for the form characteristic of divination texts.

III.

The general character of the contents of the fragment is clear. The obverse evidently opens with a scene between the serpent and the eagle, in the course of which the two agree to form a friendship in order to carry out some plan of attack together. That plan involves the capture and destruction of demons and, apparently also, of placing the entire earth under a ban. The serpent and eagle swear a powerful and binding oath in the name of Shamash who is here viewed in his usual rôle of judge and punisher of those who do wrong.

The next scene leads us to the mountain whither the serpent and eagle have gone. During the one day that they kept the agreement, they succeeded in capturing a number of animals and sharing them together. Then the catastrophe occurs. Prompted apparently by a suspicion of the serpent's fidelity, the eagle plans an attack upon the young of the serpent. At this point, unfortunately, the obverse of the fragment breaks off, and when the thread of the narrative is again taken up on the reverse, we find the eagle thrown into a hole and in a state of utter despair appealing to Shamash to help him out of his predicament. The sun-god reproaches him for what he has done, but acceding to the eagle's prayer to let him live, declares that he will send a man to his assistance. The third scene introduces us to the man who is none other than Etana. He is a shepherd¹ whose flocks have evidently suffered through the ban that has been laid upon the earth. They have failed to bring forth young and Etana, accordingly, appeals to Shamash to show him the plant of birth. Shamash in reply tells Etana to go to the mountain to the hole wherein the eagle has been thrown and there he will see the plant of birth. The fourth scene takes us back to the mountain but with the meeting of Etana and the eagle, our tablet—the second of the series—closes.

¹ See K 2606 obv. 6 *ri-e-um-ši-na* (Harper, *Beiträge zur Assyr.*, II, p. 399). It is interesting to note that on cylinders representing Etana's flight, a shepherd with his flocks is pictured as looking at the eagle bearing Etana aloft. According to Dr. W. H. Ward's plausible explanation, the accompaniments to a scene on a cylinder stand in a direct connection with the main representation, symbolizing other episodes that belong to it. In this case, therefore, the shepherd would be Etana feeding his flocks.

In order now to understand the purport of these four scenes it is necessary to pass to a consideration of the other fragments of this myth that are known to us. It is the merit of Dr. E. J. Harper¹ to have added to the three fragments dealing with a story of the eagle, serpent and Etana found by George Smith² among the tablets of Ashurbanapal's library, seven others in one way or the other connected with the two. An eleventh fragment—also from this library was published by me as indicated above³ and a twelfth—in the older Babylonian script—by Scheil.⁴

Harper divided his ten fragments into three groups as follows:—(1) containing a story of the serpent and the eagle together with what he calls—erroneously however—a prayer of Etana for his son,⁵ (2) the story of Etana's ride on the back of the eagle, (3) an assembly of the gods. In my publication of the 11th fragment, I suggested⁶ a somewhat different order but Jensen's discussion of the fragments⁷ together with the study of the 13th fragment, herewith published, has led me to a modification of my views. The new fragment shows that Jensen was right in his suggestion that the 11th fragment though ending with the consignment of the eagle to a hole in which he is to die does not necessarily involve the death of the eagle. My contention, therefore, that the episode of the eagle with Etana must be placed *before* the discomfiture of the eagle was erroneous. I now accept Harper's view which is adopted by Jensen that the story of the serpent and the eagle comes *before* that of the eagle and Etana. There is now also no reason for questioning⁸ the connection of K 8578 with Rm 79, 7—8, 43 as proposed by Harper, but on the other hand the new fragment while confirming my suggestion that the first line of K 8578 obv. is to be completed in accordance with the colophon to K 2606 rev., raises the question whether K 8578 represents the 4th tablet of the series?

¹ *Die Babylonischen Legenden von Etana, Zu, Adapa und Dibbarra* (Beiträge zur Assyriol., II, pp. 391—408).

² Chaldaean Genesis (5th ed.), pp. 138—144. ³ See above p. 101, note 2.

⁴ *Recueil des Travaux*, xxiii, pp. 18—23.

⁵ It is an appeal of Etana to the sun-god.

⁶ *Beiträge zur Assyriol.*, III, p. 371.

⁷ *Keilinschriftliche Bibliothek*, VI, 1, p. 100 note 2.

⁸ As was done by me in *Beiträge zur Assyriol.*, II, p. 370. See Jensen's strictures *KB*, VI, 1, p. 102.

Attention has already been called to the fact¹ that the colophon of our fragment contains as the opening line of the following tablet the same words as in the colophon to K 2606 rev. Moreover, the last line of K 2606 rev. would appear to be identical with the last line of our fragment. In the case of our fragment, however, the colophon states that this tablet is the 2nd of the series, whereas K 2606 is entered as the 3rd tablet of the series.² It follows that we have here two different editions of the text and that what covered only two tablets in the one copy covered three tablets in the other. The marks on the reverse of our tablet indicating the ends of lines in the copy from which our fragment was copied shows, as a matter of fact, that the 12 fragments from Ashurbanapal's library represent different copies. Since K 2606 represents on the obverse the account of the assembly of the gods—Harper's third episode—we would have to assume in order that K 2606 rev. and our fragment should represent duplicates of one another, that the broken off portion of the obv. and the rev. of K 2606 contained considerably more than the episodes which in our fragment cover the obverse and reverse. A consideration of this thesis will show that it is improbable. The new fragment, as will presently be shown belongs to a tablet much longer than any of the others and to assume that K 2606 should represent part of a tablet again twice as long (at least) as the new one is certainly highly improbable. Moreover, if K 2606 belongs to a tablet so much larger than the one of which the new fragment forms a part, we would certainly not expect—since the tablets of any edition of a series are of the same size—that what covered two tablets in the edition of which the new fragment is a part should require three tablets in the other edition but rather the reverse. A simpler solution will be suggested in the course of this discussion.

IV.

The analysis given of the new fragment shows that it belongs to Harper's first group. The next point to be made clear is its relationship to the other fragments of this group.

¹ See above p. 105, note 8.

² A renewed examination of the fragment kindly made by Mr. L. W. King confirms Harper's reading (3 wedges).

Taking up K 1547 first, we note that the reverse is a duplicate of the reverse of the new fragment which we will designate hereafter as the 13th,—ll. 5—20 of the former = ll. 10—20^a of the latter, i. e. 16 lines against 11½ lines, indicating that we have two different copies before us. The indications in ll. 16, 17, 18 and 19 of the ends of lines in the text from which the 13th fragment was copied show that the scribe had an original before him in which the lines agreed with the length of those in K 1547. The obverse of the latter shows no points of agreement with the obverse of the new fragment but corresponds with the rev. of K 2527,—ll. 23—42 of K 2527 = ll. 1—24 of obv. of K 1547. Now, the obverse of K 1547 begins with the appeal of the serpent to Shamash for revenge upon the eagle who has eaten the young of the serpent. The lower edge of the obverse of K 2527 is preserved so that we have on the reverse, as on the obverse of K 1547, the continuation of the story—the advice of the sun-god to the serpent to enter the carcass of a wild mountain bull and to pounce upon the eagle as he swoops down to eat the flesh of the carcass. The immediate continuation of this episode is furnished by the reverse of the 11th fragment. Evidently the first seven lines¹ correspond to K 2527 rev. 35—42 and to K 1547 obv. 17—24. The practical agreement in regard to lines (7 as against 8) shows that these three fragments belong to tablets of about the *same* size.

The strategy succeeds, the eagle is caught, stripped of his feathers and altogether badly battered is thrown into a hole and there left to die. This hole is evidently in the mountain, for it is to this hole to which Etana is sent by Shamash. The two tablets therefore,—K 2527 and the 11th fragment—closed with this episode, while the reverse of K 1547 represents the continuation. The obverse of the 11th fragment contains the incident of the treachery of the eagle and joins on to the end of the obverse of the 13th fragment—ll. 2—5 of the 11th fragment = ll. 29—31 of the 13th fragment, though the lengths of the lines do not correspond. The new fragment thus furnishes a piece of the narrative that takes precedence to what is contained on the other three—namely, the alliance between the eagle and the

¹ Some of my readings must be corrected as Jensen (*K. B. VI*, 1, p. 106seq.) very properly pointed out.

serpent, and their adventures until the point of treachery. Again, the obverse of K 2527 represents the episode after the destruction of the young of the serpent by the eagle, namely the appeal of the serpent to Shamash, but we have no means of accurately determining the size of the gap between where the obverse of the 11th fragment breaks off and where the obverse of K 2527 takes up the thread, but it was probably not large. At the top of the obverse of the 11th fragment only a few lines are missing, for the end of the reverse represents in all probabilities the last line of the tablet, followed by the colophon. Assuming that K 2527 and the 11th fragment represent parallel texts, both must have begun at the point represented by l. 27 of the obverse of the 13th fragment, which marks a new phase in the narrative—the beginning of the treachery. We thus obtain for these two tablets (a) obverse = 20 lines of the 11th fragment plus 20 lines of K 2527 = 40, to which we may add as a maximum a gap of say 10 lines = 50 lines and (b) reverse = 21 lines of K 2527 plus 17 additional lines of the 11th fragment = 38 lines which with 3 or 4 lines of the colophon would bring the total to about 42 lines. The break of circa 30 lines at the end of the obverse of the 11th fragment and the beginning of the reverse (20 of which are filled up by the obverse of K 2527) must of course be distributed between the two sides. We thus obtain for the total length of each of the two fragments between 90 and 100 lines, both covering the following episodes: (1) treachery of the eagle and destruction of the young of the serpent, (2) appeal of the serpent to Shamash, (3) advice of Shamash, and (4) success of the strategy and the discomfiture of the eagle. The new fragment covers this entire field and, in addition, starts at a point further back—the story of the alliance and of the adventures of the eagle and serpent in the mountain. It also continues the story after the discomfiture of the eagle, furnishing three new episodes: (1) the appeal of the eagle to Shamash for rescue, (2) the appeal of Etana for the plant of birth, (3) the coming of Etana to the place of the eagle in the mountain. The length of this tablet must therefore have been considerably greater, namely, 27 lines till the obverse of the 11th fragment plus 90 to 100 lines, and since at the top of the obverse only a few lines are missing,—inasmuch as we have the close of the reverse preserved—we may estimate the length of the

tablet to which the 13th fragment belongs at about 130 lines—perhaps only 124 lines divided between the two sides. The episode of the alliance and of the adventures of the eagle and serpent with which the obverse of the 13th fragment begins—say from 33 to a maximum of 36 lines—not being sufficient to cover an entire tablet, we are justified in assuming that in the editions to which K 2527 and the 11th fragment belonged, the tablet that preceded began at a point further back than the account of the alliance and the adventures, which could have been narrated on the reverse. In other words the relation of the edition of K 2527 and the 11th fragment, which we may call edition A, to the edition of the 13th fragment, which we may call B, is about the same as the edition of K 1547—the obverse of which = reverse of K 2527, and which we may call C, is to A; i. e.

(a) obverse of A in tablet no x of the series = rev. of B, and

(b) obverse of C in tablet no x of the series = rev. of the preceding tablet in A,

which means that the tablets of edition B contain much more than edition A, and the tablets of edition C much less than A. What therefore would be the 2nd tablet in B would be the 3rd tablet in A, while a part of it in C would even run over into the 4th tablet. The point is of importance for the relationship of the two remaining joined fragments of Harper's first group K 8578 and Rm 79, 7—8, 43.

Before taking these up, attention must be called to the relationship of K 1547 to the 13th fragment. Just as K 2527 and the 11th fragment end with the same episode—the discomfiture of the eagle,—so K 1547 and the 13th fragment end with the coming of Etana to the eagle, but while the first pair represent parallel texts, this is not the case with the latter pair, for the obverse of the 13th fragment begins at a point considerably further back than the obverse of K 1547 which (so far as preserved) starts with the advice of Shamash to the serpent. Since at the most six lines on the bottom of the reverse are missing to bring it to the point where the 13th fragment closes, there are (making allowance for a colophon on the reverse) at the most 10 lines missing at the top of the reverse. As a matter of fact, counting 8 lines back on K 2527, line 22 (= top of obverse of K 1547) would bring us to the beginning of Shamash's answer to the

appeal of the serpent and with which K 1547 in all probabilities began. The total length of K 1547 would thus be $8 + 24 + 17$ (additional lines on the 11th fragment) up to the discomfiture of the eagle = 49 lines. Then the 24 lines of the reverse of the 13th fragment plus a few lines missing at the top would make the total length of this table about 80 lines. The three editions would thus be made up of tablets as follows:

Edition A = Tablets of 90 to 100 lines

Edition B = Tablets of 124 to 130 lines

Edition C = Tablets of about 80 lines.

The calculation is naturally only approximate for the length of the lines differs somewhat also in the three editions but it is close enough for our purposes. The result reached above is thus confirmed that what corresponds to the 2nd tablet of the series in B would reach into the 3rd tablet in A and perhaps into the 4th tablet in C.

Coming now to the two joined fragments, they evidently contained the second address of the eagle to the sun-god promising to do all that was asked of him,¹ and the dialogue that ensued between the eagle and Etana upon the coming of Etana to the hole wherein the eagle lay. Etana asks the eagle to show him the plant of birth² but here, unfortunately, the fragment breaks off. The colophon to the 13th fragment, however, shows that the 3rd tablet of edition B began with an address of the eagle to Shamash and since K 8578 etc. begins with *erû pi-i-su*. Jensen accepts my suggestion, made at the time of the publication of the 11th fragment, that this line is to be restored according to the colophon of K 2606 which tallies with that of the 13th fragment. Through the contents of this fragment the conjecture is strengthened, if not indeed definitely confirmed, since, as we have seen it contains an episode to which K 8578 etc. naturally joins on. We may therefore with perfect safety assume that K 8578 represents either

¹ ll. 5-6 "whatever he will say to me [I will do], whatever I will say to him [let him do]. See Jensen *KB* VI, 1, p. 110. The reference is to Etana. L. 7 "according to the command of the warrior Shamash, [Etana took the road]" begins the episode of Etana's coming to the eagle, accompanied, apparently, by a young eagle to show him the way.

² Line 12 seq. evidently repeats in substance rev. 17 seq. of the 13th fragment—the same appeal being made by Etana for the plant of birth, but this time addressed to the eagle.

the beginning of the 3rd tablet of edition B or the 4th (or more probably the 5th) of edition C. To which of these two editions it actually belongs, it is of course impossible to say. Dividing the contents of all the fragments of the first group now known to us (KK 1547, 2527, 8578 etc.) and the 11th and 13th fragments into episodes we obtain the following survey:

(1) The alliance between the eagle and serpent and the adventures of the two recounted on the obv. of the 13th fragment ll. 1—26.

(2) The treachery of the eagle proposed and carried out despite the warning of a "very wise" young eagle recounted (a) on the remaining portion of the 13th fragment, ll. 27seq. and (b) on the 11th fragment obverse.

(3) The appeal of the serpent to Shamash for revenge on the eagle, recounted on K 2527, ll. 1—14.

(4) Advice of Shamash to the eagle recounted (a) K 2527 obv. 15—28 (including 6 missing lines), (b) K 1547 obv. 1—9 (circa 8 lines missing).

(5) The carrying out of the strategy proposed by Shamash and ending with the discomfiture of the eagle recounted (a) on the reverse of the 11th fragment (end of tablet) (b) rev. 30—42 of K 2527 (circa 17 lines missing to end of tablet) (c) K 1547 obv. ll. 10—24 (circa 17 lines missing of episode).

(6) The appeal of the eagle to Shamash for rescue and the latter's decision to send Etana to help the eagle out of his plight, recounted (a) on the reverse of the 13th fragment ll. 1—11 and (b) on the rev. of K 1547 ll. 1—6 (circa 6 lines missing).

(7) Etana's lament and request for the plant of birth recounted (a) on the reverse of the 13th fragment ll. 12—18 and (b) on the reverse of K 1547 ll. 7—16.

(8) Address of Shamash to Etana and the order to the latter to go to the hole in the mountain into which the eagle has been cast, recounted (a) on the reverse of the 13th fragment ll. 19—24 (end of 2nd tablet of edition B.) and (b) K 1547 rev. 17—20 (circa 6 lines missing to end of tablet).

(9) Second address of the eagle to Shamash, the coming of Etana and the dialogue between the eagle and Etana recounted on K 8578 + Rm 79, 7—8, 43 (3rd tablet of edition B or 5th(?) tablet of edition C).

Let us now take up the fragment K 2606 which contains in the colophon the indication that it is the third tablet of

the series *ala i-ši* "he left the city". Scheil does not appear to have noticed that the fragment published by him, which I designate as the 12th, runs parallel to a considerable extent with K 2606,¹ so that in part the latter can be restored through comparison with the former,² and vice versa some readings of Scheil can be corrected. But on the other hand the two fragments are not duplicates. Not only do they diverge from a certain point,³ but Scheil's fragment is a large tablet dating from the Hammurabi period with two columns to each side.⁴ The two accounts appear to stand in the relation to each other of the beginning and end of an episode. In both a state of anarchy is described, due apparently to the hostility of the Igigi.⁵ The land is without a ruler. Authority is lacking, habitations and sanctuaries are not built, and the city⁶ is besieged by the Igigi, but while the description of the terror

¹ ll. 10—16 of K 2606 correspond to ll. 1—9 of the 1st col. obv. of the 12th fragment.

² In K 2606 l. 9, we must evidently read [*ra*-]*bu-tum*; ll. 9—11 can now be restored according to ll. 1—3 of the 11th fragment. In l. 4 of the 12th fragment we must read according to K 2606, 12 *kali-ši-na i-lu i-gi-gu*. For the latter we have in K 2606 the ideographic form. In l. 2 of the 11th fragment read *im-ta-li-ku*. The traces of an additional line seem to have been omitted by Harper between lines 12 and 13. Scheil's reading for the beginning of l. 7 can hardly be correct, while if we substitute *ina u-mi-šu-ma* (like K 2606 l. 14) we get a perfect sense. In l. 9 of the fragment we must read *la ba-nu-u kib-ra-ti ni-iš pa-ra-ak-ki* like l. 16 of K 2606. L. 8 of the fragment evidently contains the phonetic writing *uk-ni-a-am* for the ideograph *Za-Gin* (= *uknu*, Brünnow, Nr. 11776) in l. 15 of K 2606. Cf. Scheil, *Recueil des Travaux*, xxiii, 22 who wrongly, as it now turns out, rejected the proposed reading. At the close of l. 10 of the 12th fragment we must evidently read *e-lu da-ad-nim* = *êlu da-ad-mi* (l. 18 of K 2606). At this point the two texts divide. It should be noted that this 12th fragment now in the J. Pierpont Morgan Collection in New York (see Johns, *Catalogue of the Collection* p. 22) is not only badly preserved but very difficult to read, so that without a parallel text one easily misreads certain signs.

³ See close of preceding note.

⁴ Apart from palaeographic evidence, the tablet has also the ear marks of the Hammurabi period in the expanded phonetic writings like *u'-ni-a-am*, *ma-a-tam ši-im-tim* etc. The determinative for deity is omitted before Etana—also characteristic of the Hammurabi period. The tablet is a valuable indication of the age of the Etana story.

⁵ Seven in number. Cf. l. 17 of K 2606 (*il*) *si-bit-tum* with l. 19 (and 12) the ideographic form 5 + 2.

⁶ l. 19 *ala Igigi šu-tas-ju-ru*[-*u*]. The city is evidently the one referred to in the opening line of the series *ala i-ši*, and where the subject is some god

in regard to which the Annunaki hold counsel is continued in the 12th fragment, in K 2606 the goddess Ishtar¹ is represented as intervening. She looks about for a king and places him in control, while En-lil looks out for the sanctuaries of the gods(?).² It would be in accord with the character of the Babylonian style of poetic composition to repeat at the close of an episode the description of the conditions existing at the beginning, witness the frequent descriptions of *primaëval* chaos in the Babylonian creation myth. Unfortunately, the reverse of K 2606 is not preserved with the exception of the closing line and a part of the last line. The colophon furnishes as the opening of the 4th tablet, a line that agrees with the one given in the 13th fragment for the 3rd tablet, and since the preserved portion of the closing line in K 2606 agrees with the closing line of the 13th fragment,³ it would be too strange a coincidence if the two tablets did not close with the same incident—the coming of Etana to the place where the eagle lies.

On the other hand, if what covered three tablets in one copy corresponds to two tablets in another, the tablets of the former must have been of a smaller size and we cannot therefore assume that from the point where the obverse of K 2606 breaks off to the end of the reverse there should have been included all the eight episodes covering about 125 lines embraced in the 13th fragment. We are thus confronted with a problem for which no definitive solution can be offered until more fragments of the narrative come to light, but the most reasonable conjecture is to assume that various versions of the tale existed, differing considerably from one another and in which episodes were included in one version that were *omitted* in another. So much is clear that the anarchy described in the 12th fragment and in K 2606 must have preceded the rescue of the eagle by Etana, and since the narrative can now be carried back continuously to the alliance

who is represented as deserting the city. If, as is possible from the reference in l. 24, the god is Enlil, the city in question might be Nippur.

¹ Also designated as In-nin-na in l. 22.

² The reading l. 24 *pa-rak-kê ilâni*, seems to me preferable to *parakkê schamê* which Harper proposes. The photograph (p. 505) favors either reading.

³ In the 13th fragment we have as the closing line *ul-la-nu-um-ma ul-tak-ka-aš-[šu]* and in K 2606 . . . *la-nu-um uš-ta-ka-aš-šu*.

between the eagle and the serpent, the state of anarchy must have preceded this incident also. There is every reason, therefore, to believe that Scheil¹ is right in his supposition that the state of anarchy represents the beginning of the entire narrative,² just as the Gilgamesh epic opens with a description of terror and confusion existing in Uruk.

Accepting this as a working hypothesis, we would have to assume that the first tablet of the copy of which the 13th fragment represents the 2nd, contained the episode of the state of anarchy and the restoration of order. Then followed the eight episodes covered by the 2nd tablet, after which came another address of the eagle to Shamash—perhaps a second appeal—then presumably an answer of the sun-god and, finally, the coming of Etana to the eagle. The joined fragments K 8578 + Rm 79, 7—8, 43 represent the beginning of this immediate continuation of either the 13th fragment or of K 1547.

The episode in the 12th fragment and with which K. 2606 begins must therefore be removed from the position assigned to the latter by Harper as a third group and placed before the nine episodes into which we have divided the first group. Harper's second group consisting of the joined fragment and supplemented by three further fragments and recounting Etana's flight on the back of the eagle remains where it is and would thus form the conclusion of the tale. The flight naturally follows the rescue of the eagle by Etana. Taking the joined fragment Rm 2, 454 + 79, 7—8, 280 as one, it is clear that this and K 8563 are duplicates or parallels and that both began with the story of the flight.³ K 3651 of which only a part of the obverse is legible, joins on at l. 18 to the reverse of Rm 2. 454 etc. while Rm 522 (only one side preserved) duplicates K 3651, beginning with l. 12 of K 3651 and extending

¹ l. c. p. 18.

² If this be so, it must be borne in mind, as above pointed out, that K 2606 being the 3rd tablet of the series represents the *repetition* of the description as an introduction to an account of the restoration of order by Ishtar and Enlil.

³ Harper has confused the obverse and reverse of K 8563. In K 8563, the beginning of the obverse is preserved. Lines 6—17 of K 8563 = ll. 1—16 of obverse of Rm 2, 454 etc. The reverse of K. 8563 refers to the "death" of the king(?) Etana (l. 4) and to his shade (*e-dim-mu-su* l. 7) and therefore furnishes some incident that followed upon the flight.

5 lines beyond the latter, ll. 26—30 of Rm 522 corresponding to ll. 24 to 27 of the reverse of Rm 2, 454 etc.¹ If we are to assume that these two fragments (K 3651 and Rm 522) also began with the account of the flight, we would have to suppose for the former at least 40 additional lines at the top, which would give us a tablet of at least 130 lines and for the latter an addition of 50 lines at the top which would give us a tablet of 160 lines. This is most unlikely and it is much more probable that both fragments began with the second—and fatal—flight to the place of Ishtar, the first ending successfully with the arrival at the gate of Anu, Enlil and Ea.² This second flight forming a new episode would be an appropriate place at which to begin a new tablet. The joined fragment and K 8563 would thus contain both episodes, while the other fragments would begin with the second flight—the same relationship therefore as between K 2527 and K 1547. If we assume (as above suggested), that the story of Etana's coming to the eagle extended into the 5th tablet of edition C, we may suppose that the episode of the first flight was still told in this tablet and that the two fragments therefore represent the beginning of the 6th tablet of this edition—and in all probabilities the last tablet of the series.

The larger size of the tablets of edition B (to which the 13th fragment belongs) warrants us in assuming that both flights were included in one tablet. Rm 2, 454 might, therefore, represent the 4th tablet of edition B though this would assume a long narrative in the 3rd tablet before the actual flight began. Perhaps here too it may be more reasonable to suppose that the other two fragments represent the 4th tablet of edition B and the 5th of edition A, while Rm 2, 454 which is a much broader tablet than the others (see the photographs in Harper, *BA*, II, p. 509 compared with p. 503) would then represent a fourth edition of the narrative—complete perhaps in three or at the most in four tablets. Certainly, the fatal issue of the second flight must bring us to the end of the narrative. The result of our examination thus shows that the fragments so far recovered represent five and probably six different copies of the text:

¹ Note also that ll. 18—23 of reverse of Rm 2, 454 etc. = ll. 17—25 of reverse of Rm 522 = ll. 18—24 of K 3651 obverse.

² ll. 34—36 of reverse of Rm 2, 454 etc. See also below p. 125.

- (1) Edition A in 5 tablets
- (2) Edition B in 4 tablets
- (3) Edition C in 6 tablets
- (4) Edition D in 3 or 4 tablets
- (5) A fragment of an edition (K 2606)

which may not have contained all the episodes. All these are in the Kouyunjik collection, to which is to be added the (6) fragment of the Hammurabi period—a large tablet with two columns to each side—representing the beginning of the story and which probably told the whole story in one tablet.

V.

Combining now to the various fragments of the story and leaving aside the possibility that in some version or versions certain episodes were not included, we may reconstruct the story so far as known to us up to the present as follows. The scene is laid in a city which has been deserted by its patron deity or possibly by the gods in general. A state of confusion and anarchy exists, due apparently to the hostility of the Igigi. The Anunnaki hold a counsel in order to put an end to this state of affairs. The goddess Ishtar and the god Enlil appear to be the ones designated to come to the rescue. A king is put in control on earth by the goddess, while on high Enlil aids in re-establishing order. As in so many of the Babylonian myths, we thus have a correspondence between occurrences on earth and phenomena in the heavens. Confusion and anarchy below is paralleled by disturbances on high. During this state of anarchy, productivity ceases on earth. The sheep do not bear young, the gods are deaf to appeals or powerless to intervene against the ravages committed by hostile powers.

Eagle and serpent are next introduced as forming an alliance to carry on a work of destruction. They defy the authority of Shamash who represents order and justice. From the fact that the king whom Ishtar places in control is also designated as *re'u* "shepherd" and that Etana appears in the story as a shepherd,¹ we may perhaps be permitted to conclude that the king who is installed or possibly re-installed by Ishtar is none other than Etana. However this may be, there is certainly a

¹ See above p. 111.

direct connection between the ravages committed by the eagle and serpent and the distress of Etana, both being due to the general confusion that exists through the lack of control on the part of those higher powers that represent order and the harmonic working of the laws of nature. The state of affairs reminds one somewhat of the conditions that prevail during the period that Ishtar is retained as a prisoner in the lower world, during which time likewise the animals do not bring forth their young.¹ In this case we have, as is generally recognized, a nature myth portraying the change of seasons; and in view of the frequency with which this *motif* reoccurs in Babylonian myths, it is not improbable that the conditions portrayed at the beginning of the Etana story rest on the same general basis—a portrayal of the rainy and stormy season in the heavens and on earth, which could be symbolically represented as a time of confusion and disorder.

All this, however, must be viewed as merely conjectural until a fortunate chance shall bring to light more fragments of this part of the narrative.

The alliance between the eagle and the serpent comes to an untimely end. They go into the mountains to hunt for food. Each is accompanied by a young brood. First the eagle kills an animal and shares it with his young (or with the young of the serpent), then the serpent kills an animal and shares it with his young (or with the young of the eagle), but the eagle seizes the opportunity while the young of the serpent are engaged in eating to pounce down upon them. He does this despite the warning of one of the young eagles, described as "very clever" or "very wise", who urges him not to break the laws of Shamash i. e. not to run counter to the laws of righteousness and justice. The eagle consumes the young of the serpent and the latter appeals to Shamash for revenge for the injury inflicted. Shamash listens to the serpent and proposes a strategy. He advises the serpent to conceal himself within the carcass of a wild bull—one of the animals slain during the alliance between the eagle and the serpent—and then when the eagle swoops down upon it, to seize him and tear him to pieces. The strategy succeeds. Again the young eagle warns the father eagle and again the latter pays no heed to the

¹ Cun. Texts XV, Pl. 46 rev. 6—7.

warning. He lands upon the bull, the serpent jumps out, tears the wings and feathers of the eagle and the latter is left to die in a hole in the mountains. He does not die however. It is now the eagle's turn to appeal to Shamash to whom he promises eternal obedience, if only the sun-god will help him out of his plight. At the same time Etana "the shepherd" daily appeals to Shamash to again bring about fertility among his sheep. He asks the sun-god to show him the plant of birth that he may give it to his flock. Through the new fragment the meeting of the eagle and Etana is for the *first time made clear*. The plant of birth grows in the mountains in the very hollow into which the eagle has been cast. Shamash reveals this to Etana who takes the road to the mountain and, guided by one of the young eagles (if Jensen's restoration *KB VI. 1 p. 110. 8* is correct), comes across the eagle. The eagle appeals to Etana to release him from the hole and as a reward promises to fly with Etana to the dwelling of the gods. We are unfortunately left in doubt whether Etana secures the desired plant and the gap in the narrative at this point also prevents us from ascertaining the purpose of the flight. In a general way we may conjecture that the eagle holds out the hope to Etana of being placed among the gods, in other words of securing immortality like e. g. Ut-napishtim, the hero of the deluge. This is a favorite theme in Babylonian myths which, it will be recalled is introduced into the Gilgamesh epic.¹ Etana mounts on the back of the eagle and together they fly upwards. They reach the heaven of Anu and at the gate of Anu, Enlil and Ea—i. e. the ecliptic,² they make a halt. So far so good. Again a gap occurs in

¹ See Jastrow, *Religion of Balylonia and Assyria* (English ed.) pp.494 seq.

² The ecliptic, known as the *larran Šamši* "road of the sun" (see Kugler, *Sternkunde und Sterndienst in Babel*, I, p. 259; Thompson, *Reports of the Astrologers* etc., Nrr. 88, 103; Virolleaud, *L'Astrologie Chaldéenne*, *Ishtar*, Nrr. XXI, 73; XXV. 57, 58 etc. etc.), is divided into three sections, known as the "road for Anu," "road for Enlil" and "road for Ea" respectively (Virolleaud, *Ishtar* Nr. IV). The gate of Anu, Enlil and Ea is therefore synonymous with the entrance point of the ecliptic. The Etana myth thus assumes the established astrological system, as is also indicated by the goal of the second flight—the station of Ishtar, identified in the astrological system with the planet Venus. See Jastrow, *Religion Babyloniens und Assyriens*, II, pp. 441 and 444 seq. In the Adapa myth, the hero also reaches the gate of Anu (Jensen, *Keilinschriftl. Bibl.*, VI, 1, p. 96).

the narrative and when the thread is once more taken up, we find the eagle urging Etana to continue the journey in order to reach the place where Ishtar—i. e. the planet Venus—dwells. As in the case of the first flight, a distance of three *kasbu* or six hours is covered. Whether at this point the eagle's strength is exhausted or whether the goddess herself intervenes, at all events the precipitous descent begins. The eagle falls through the space of three double hours and reaches the ground. The close of the narrative is missing but clearly the purpose of the flight has failed. We are left to conjecture what happened to Etana and to his ancient "airship."

In view of the composite character of so many of the stories that have come down to us from ancient Babylonia,¹ it will not seem hazardous to assume that in the Etana myth two originally independent tales have been combined, one based on a nature myth and describing a state of anarchy and confusion in a city which was deserted by its patron deity or by the gods in general. During this period all fertility ceases. The Igigi are hostile to the city and among those who suffer from the anger of the gods is Etana, the shepherd whose sacrifices to the gods are of no avail in bringing about fertility among his flocks. Order is restored through the intervention of Ishtar—the goddess of fertility in cooperation with Enlil. After the restoration, Etana appeals to Shamash—or perhaps originally to Ishtar to show him the plant of birth of which he has heard and through which his sheep can again be brought to bear young. The request is granted. Etana, it would appear, is also reinstated as ruler over his people and it is reasonable to suppose that the tale ended with the transfer of Etana as a favorite of the gods—like Ut-napish-tim—to a place among the immortals.

A second tale is that of an alliance formed by the eagle and the serpent, the treachery of the former and his punish-

¹ For the creation story see the author's paper "On the Composite Character of the Babylonian Creation Story" in the Nöldeke Festschrift Vol II, pp. 969—982; for the Gilgamesh epic, the author's *Religion of Babylonia and Assyria* (English edition), pp. 513seq. and Hermann Schneider, *Die Entwicklung des Gilgameschepos* (Leipziger Semitistische Studien, V, 1) who (p. 83) calls attention also to the parallels between Etana and Gilgamesh which led to the later confusion of the two by Greek writers.

ment through the intervention of Shamash—the representative of justice and order. This tale appears to be a piece of ancient folklore rather than a myth, to which there has been added after the manner of folk tales a moral—not to break the decrees of Shamash.

These two tales—the modified nature myth and the folk-tale with a moral—were combined, just as in the Gilgamesh epic the two independent series of tales of Gilgamesh and Etana were combined.¹ The alliance of eagle and serpent who join forces in a warfare against the animals of the mountains is made a feature of the confusion that reigns while the gods manifest their anger or hostility. The serpent's appeal to Shamash for vengeance suggests Etana's appeal to the god for the plant of birth and the complete link between the two tales is brought about by the meeting of Etana and the eagle in the mountain where the sought for plant is to be found. The transfer of Etana to the gods leads to the episode of the eagle carrying him thither as a reward for helping the eagle out of his sad plight. That through the combination both tales underwent a modification is surely natural. So it is a reasonable conjecture that in the story of the eagle and the serpent, the former actually dies after being torn to pieces by the serpent. Indeed if one reads the description, it is difficult to see what else can happen to the eagle except death. There seems to be nothing left of him after the serpent finishes his work. In order to connect the two tales, the eagle is revived and is rescued by Etana. Similarly, in the original tale of Etana, there is every reason to suppose that he was actually placed among the gods. This is shown by the success of the first flight in which the goal is attained, since the heaven of Anu—the highest part of heaven²—is reached. The second flight is clearly a duplicate of the first and betrays in the language used its dependance upon the former. It is a favorite theme with the Babylonian theologians to whom we owe the preservation and final form in which the old folk tales and popular myths were cast, that man cannot come to the gods, nor can he find out what is in store for him after death, beyond the certainty that he will be condemned to inactivity in a

¹ See the references in the preceding note.

² Gilgamesh Epic, XI, 115.

gloomy subterranean cavern. There may be exceptions but that is the general rule. It would be quite in keeping with this spirit if in the combination of the two tales, Etana is pictured as prevented from attaining his goal. Instead of being brought into the presence of Ishtar he is thrown down to the earth. Just as he appears to be approaching his goal, the eagle with Etana on his back falls through the great space of three double hours¹ that he has traversed—just as Gilgamesh after all his wanderings comes back to Uruk whence he started out with his main purpose—the securing of immunity from death—unaccomplished. The two tales thus combined are made to teach a lesson or rather two lessons,—(a) one that the laws of Shamash cannot be transgressed without entailing grievous punishment and secondly—and more important—(b) that man cannot be immortal like the gods. It is this lesson which the Babylonian theologians made the burden of the composite Gilgamesh epic, as is shown by the close of the tale on its present form. It is this lesson likewise which is illustrated by the tale of Adapa who through a deception practised on him forfeits immortality;² and it is this same lesson which, as it seems to me, the Etana myth in its final form was intended to convey.

In view of the new and important fragments of the myth that have been found since Harper published his study of the text fifteen years ago, it would be profitable to reconsider in detail the many parallels of the story found among other nations and to some of which Harper already called attention.³

¹ That the 2nd flight is merely a duplicate of the first is seen in the persistence of the "three double hours" as the distance traversed. In reality the two flights cover six double hours and the eagle ought to fall this distance before reaching the earth.

² See Jensen, *Keilinschriftliche Bibliothek*, VI, 1, pp. 94–101.

³ *Beiträge zur Assyriologie*, II, pp. 404–407. In the story of the Kai Kaus or Kavi Usan, the King of ancient Iran (990 B. C. according to traditional accounts), who attempts to fly to heaven with the help of eagles and comes to grief, we can see the influence of the myth of Etana, transformed and adapted to teach the lesson of punishment for heaven-defying pride. In a paper on this story, read before the American Oriental Society, April 21st, 1909, under the title "A Legend of Aerial Navigation in Ancient Persia," Professor Jackson gave the various Persian and Arabic sources for the tale, viz: The Pahlavi Dinkart 9. 22, 5–12 (translation by West in *Sacred Books of the East*, v. 37, pp. 220–223); Tabari's *Annales* (ed. de Goeje I, pt. 1, p. 603; Firdusi, *Shahname* (ed. Vullers & Landauer I, 411–412, ll. 461–486; 2, 1638, ll. 2018–2019);

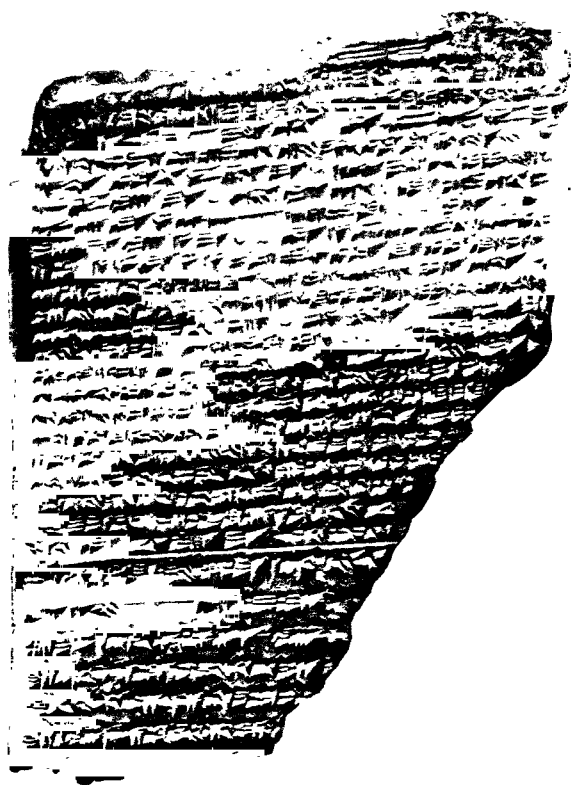
To do so, here, however, would carry us too far and must be left for some other occasion.

Al-Tha'alibi, *Histoire de Rois des Perses* (ed. Zotenberg, Paris, 1900, p. 165), told in connection with Kai Kaus' building of a high tower in Babylon, from which the attempt to reach heaven by means of eagles was made. This interesting combination of the aerial flight with a tale that is evidently suggested by the biblical story of the Tower of Babel, is a direct consequence of the introduction of the moral element in the old nature myth. The biblical story, voicing the same warning against ambitious pride, was associated with the tale of Kai Kaus and the latter made the central figure of the combined tales.

May we perhaps see in the flight of Ganymede with the eagle to the seat of the gods and in Psyche's flight with the winged Cupid and her fall to earth, (as told in Apuleius' beautiful tale of Cupid and Psyche—*Metamorphoseon* V, 104) traces with modifications of the episode in the Etana myth? Cf., moreover, Meissner, *ZDMG.* 48, p. 190, note 5 about the story of Kai Kaus.

30. Obverse



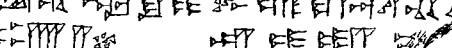


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1. 此項工程，係屬重要工程，應由本局派員督同各該管段工程處，分段負責，限期完成，不得延誤。其工程經費，應由各該管段工程處，分別撥付，不得由本局統籌撥付。其工程進度，應由各該管段工程處，分別彙報，不得由本局統籌彙報。其工程質量，應由各該管段工程處，分別檢查，不得由本局統籌檢查。其工程安全，應由各該管段工程處，分別負責，不得由本局統籌負責。其工程環境，應由各該管段工程處，分別保護，不得由本局統籌保護。其工程社會，應由各該管段工程處，分別協調，不得由本局統籌協調。其工程其他，應由各該管段工程處，分別處理，不得由本局統籌處理。

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25.  Reverse

三、五、七、九、十一、十三、十五

The Origin and History of the Minaret.—By RICHARD J. H. GOTTHEIL, Professor in Columbia University, New York City.

THE minaret is usually considered to be one of the most distinctive features of the Muhammadan mosque and the history of its origin is naturally of interest to the student both of Islam and of the history of architecture. But unlike the Mihrāb (prayer-niche) and Minbar (pulpit), the references to the minaret in Arabic literature are very few; and the traditions that have gathered around it are so scarce as to make one feel that the religious significance that attaches to the Mihrāb and the Minbar are entirely wanting in the Minaret. Indeed, the name itself is strange, and in no way expressive of the purport for which the object was built. The word *منارة* can have meant originally only "an object that gives light". As such, it is used in old Arabic poetry for the oil lamp or rush light used in the cell of the Christian monk, exactly parallel to the Syriac *m'nārtā*;¹ from which, however, it is not necessary to derive the word, as Guidi and Fraenkel² have done, seeing that the formation is perfectly regular. It is then used for a "light-tower" or "light-house";³ the signification "a monk's cell or chamber for retirement", given by Lane⁴ from the *Kanz al-Ma'rūf* must be a late and a local one. Schwally has suggested,⁵ and he is followed by Douttée,⁶ that the application of the word *manārat*^{un} to the tower of a mosque is due to the light held by the Muezzin as he recites the call to prayer at night which gives the onlooker below the idea of a light-tower; but the explanation strikes one as involved and far-fetched. The transfer of the name from a light-tower

¹ Guidi, *Della sede primitiva dei popoli Semitici*, p. 38. Cfr. e. g. Imrulkais (ed. Ahlwardt) 148, 37. Ibid. 152, 20 *منارة* = مصباح.

² Guidi, *loc. cit.*, p. 37; Fraenkel, *Aramäische Fremdwörter*, p. 270.

³ See, e. g., the description of the lighthouses of the coast of Syria in al-Mukaddasi (Ed. de Goeje), p. 177.

⁴ p. 1728.

⁵ *ZDMG.* 52, 145.

⁶ *Les Minarets et l'appel à la prière* in *Revue Africaine*, 43, 339.

to the tower of a mosque must have been occasioned by the resemblance of the one to the other. It is impossible to fix the time at which this transfer was made. The earlier and more significant designation of the minaret is *mī'dhanah* or *midhanah* (pronounced in the language of the street *ma'dhanah*)¹ —“a place from which the time of prayer is *announced*”; but it occurs seldom in the literature of the Middle Ages, and seems to have been driven out completely by the more common word *manārah*.

It is generally conceded that the earliest mosque in Islām had no minarets at all.² The mosques built in the days of Mohammed at Kūbā and Medinah were so simple that there was no place for building anything like a tower, even if the means and the necessary skill had been available. Caetani, in his monumental *Annali di Islam*,³ has shown that the mosque at Medinah was, at first, intended simply as a *dār* or private dwelling for the prophet and his family: there was no intention to build a place of assembly for the faithful. A court with a portico around it, through which one entered into the living-rooms of the family was all that it contained. The whole was surrounded by a wall which was to preserve the privacy of the *dār*. We have here, in embryo, the open *Ṣaḥn* and the closed *Liwān* of the later mosques. Bilāl, the first Muezzin, was in general the herald of Mohammed, not only the caller to prayer. The *Adhān* itself was copied from the Christians and the Jews.⁴ Ibn Hishām tells us that when

¹ Or *mā'dna*; Lane, *Cairo Fifty Years Ago*, p. 78. In a story told in *Kitāb al-Aghānī* xx, 85 *مأذنة*, *منارة* and *مومعة* are used promiscuously.

² The historians of architecture, then, go too far when they say, as does Adamy, *Architektonik auf historischer und ästhetischer Grundlage*, II, 16: “Ein oder mehrere Türme, Minarets, waren gleichfalls notwendige Bestandteile für die Moscheen”. So, also, Adolf Fähr, *Grundriß der Geschichte der bildenden Künste* (Freiburg 1897) p. 272: “wesentlich waren endlich die Minarets”; and Lübke, *Grundriß der Kunstgeschichte*, 13th ed. II, 70: “Minarets . . . sind ebenfalls unumgänglich”. The *Adhān*, itself, however, is necessary; Dardīr, *Sharḥ aḥrab al-masālik* p. 46: *الاذان سنة مؤقّدة بكل مسجد*.

³ I, 438 et seq.

⁴ Of course, Mohammedans do not admit this: in fact, the Jews are presumed to have been surprised; al-Zurkānī, *Sharḥ al-Muwatta'*, 121: *وذكر أهل التفسير أن اليهود لما سمعوا الاذان قالوا لقد ابدعت يا محمد شيء لم يكن فيما مضى*. Mohammedan Scholastics have all sorts of conceits in regard to the origin of the *adhān*, e. g. that Gabriel was

the first Moslems came to Medinah they prayed without any preliminary *adhān*.¹ But the Moslems heard the Jews use a horn,² and the Christians the *Nākūs* or clapper (the so-called *ἄγια ξύλα* or *σημεντρόν*, a long piece of wood struck with a flexible *wabīl*, the Aramaic *nākōshā*, which is still in use among the Nestorians³); and they wanted something similar for their own use. So Mohammed gave the command "Rise, O Bilāl, and summon to prayer!" Later tradition has embellished this simple account. Al-Nawawī gives the words in this wise "Go to some prominent place and summon to prayer".⁴ It was quite natural that Bilāl should make use of a position from which he could best be seen and heard. Upon one occasion, during the *Umrat al-Ḳaṣū* in the year 7, Mohammed ordered Bilāl to recite the *Adhān* from the top of the Ka'bah;⁵

the first to recite it in heaven (al-Sharkānī. *Hūshiyah* I, 231), and that Adam or Abraham was the first on earth to follow the custom (al-Zurkānī, *loc. cit.*).

¹ ed. Wüstenfeld, p. 347: وقد كان رسول الله حين قدموا ائما يجتمع: الناس للصلاة بغير دعوة كان المسلمون 3; *al-Ḳaṣṭallānī, Irshād al-Sārī* II, 3 حين قدموا المدينة يجتمعون فيتبعون الصلاة ليس ينادى لها. Cf. Muslim, *al-Sahīḥ* (Delhi 1309), p. 164; al-Zurkānī, *Sharḥ al-Muwatta*, p. 121.

² As far as we know. the Jews used the horn (*shōfār*) only on certain festivals. On the Arabic pronunciation of שֹׁפָר see al-Ḳaṣṭallānī (*loc. cit.*) ويسمى الشبور بفتح الشين المعجمة تشديد الموحدة المضمومة (= שֹׁפָר; cf. Jawālīkī, ed. Sachau, p. 94; Ibn Hishām, ed. Wüstenfeld II, 108). The earlier traditions use the word قرن (Muslim. *al-Sahīḥ*, p. 164) or بوق (Ibn Hishām I, 348; al-Zurkānī, *Sharḥ al-Muwatta*, p. 121; al-Ṣiṭṭī. *al-Ḥaṣā'is al-Kubra*. Hyderabad 1319, I, 196). Another word used appears in various forms: قنق, قنق, قنق (Ibn Hishām II, 108). *Lisān* (X, 131, 174) and *Tāj al-Arūs* (V, 478) decide for قنق, though there are authorities against them. Another, and later, tradition mentions a fire-signal: ذكروا أن يعلموا وقت الصلاة بشيء يعرفونه فذكروا أن يشفع الاذان Muslim *loc. cit.*; al-Bukhārī (ed. Krehl) I, 75; Zurkānī, *loc. cit.*; Ibn Hishām II, 108 (note in one Ms.).

³ Payne-Smith. *Thesaurus Syriacus* 2466. The *Nākūs* was indeed used at first for the early morning *adhān* in Fostat; al-Makrīzī, *al-Khitāt*, 2nd ed., iv, 8. On the use of the word in the older poetry, see Jacob, *Das Leben der vorislam. Araber*, pp. 85, 122 and Douttée, *Les Minarets*, passim.
⁴ موضع بارز الى موضع بارز. *ibid.* p. 3; Zain al-Ābidīn, *al-Baḥr al-Rā'ik*, p. 268 موضع عال في موضع عال.

⁵ Ibn Saad, *Biographien*, ed. Sachau, III, 1, p. 167; Wellhausen, *Mohammed in Medinah*, p. 302. Ibn Hishām, p. 822, says only that Mohammed ordered Bilāl to recite the *adhān*; but see *Die Chroniken der Stadt Mekka*, iv, 109.

which to some of the Meccans appeared to be an unholy act. Upon another occasion, so the tradition runs, Bilāl issued the call from the top of a high house that happened to be in the neighbourhood of the mosque;¹ and in the time of the Umayyads, the poet al-Farazdak still speaks of the *Adhān* as being pronounced "on the wall of every city".² Even in the later law books it was laid down that "the Muezzin, if he is on the road, may call to prayer while riding; if he descends (from his beast) he must halt, but if he is riding, he need not halt".³ The example set by Mohammed, and especially by Bilāl, was followed; even though no formal prescription can be found in reference to the ceremony. If the Mosque is large, says a later authority, "there is no harm if a Muezzin call to prayer from each one of its sides, so that all that are near it may hear him at one and the same time."⁴

There is then, as will be seen, no mention of a special place for the Muezzin. We first hear of minarets in connection with the mosque of Medinah under the Umayyad Walid ibn 'Abd al-Malik (86-96 A. H.).⁵ This holds good, also, for the early mosques built outside of the *Balad al-Harām*.⁶ The mosque of Kufah was built by Sa'd ibn abi al-Wakkās in the year 17;⁷ and that of Basra by Abī Mūsa al-Ash'arī in the same year;⁸ but in connection with neither of these is anything said about a minaret. The one attached to the Basra mosque is said to have been added by Ziyād ibn Abī Sufyān during the Caliphate of Mu'āwiyah.⁹ One of the earliest mosques built was that of 'Amr ibn al-Āṣī in Fostat, Egypt. It was,

¹ Ibn Hishām p. 348; Zain al-'Abidīn, *Al Baḥr al-Rā'ik* p. 268 'Abd al-Rahmān ibn al-Kāsim, *Kitāb al-Mudawwanah* I. 60 in the name of Mālik ibn Anas., al-Shāfi'ī. *Risālah* II, 152 وقد رأيت بعض المؤذنين يصلى على ظهر المسجد الحرام بصلاة الامام (حدثنا اصحابنا). Cfr., also, al-Shi'ūṭī, *al-Ḥaṣḥā'is al-Kubra* I. 196 (but only اصحابنا).

² وحتى علا في سور كل مدينة منادٍ بنادى فوقها بلان; cited on the authority of Ibn Barri, *Lisān* XVI, 150.

³ 'Abd al-Rahmān ibn al-Kāsim in note 1.

⁴ al-Kaṣṭallānī II. 17.

⁵ Schwallby in *Z. D. M. G.* LII. 143, citing al-Samhūdī.

⁶ For the mosques built in the Maghreb, see W. and G. Marçais, *Les monuments arabes de Tlemcen* (Paris 1903), p. 46.

⁷ al-Bilādhurī (ed. de Goeje), p. 275; Yāqūt IV, 325.

⁸ al-Bilādhurī, pp. 346, 347; Yāqūt I, 640.

⁹ al-Bilādhurī, p. 348.

to judge from the accounts, a very simple building, without even a concave *mīhrāb* and with a very low roof:¹ and certainly, it had no minaret. There is a definite tradition that before the time of Maslamah ibn Mukhallid, one of Mu'āwiyah's governors in Egypt (ca. 36 A. H.), there was no elevated place at all for the Muezzin. Mu'āwiyah ordered him to increase the size of the mosque and "to build *ṣawāmī'*" for the *adhān*. So Maslamah constructed for the *jāmi'* four *ṣawāmī'* at its four corners. He was the first one to construct them in it; they having not existed before this time . . . the stairway, by means of which the Muezzins mounted was in the street, until Khālīd ibn Sa'īd transported it inside the mosque". What the *ṣawmā'ah* was, we do not know. The Arabic lexicographers derive it from a root meaning "to be sharp, pointed" or "to be provided with points or teeth";² but the root is one that is very rare in Arabic and it has no congener in the other Semitic tongues³. The word seems to have come to the Arabs from the name given to the cell of the Christian monk—perhaps in connection with the Stylites who lived on the top of a pillar. At least, both Bar 'Alī⁴ and Bar Bahlūl⁵ gloss

¹ al-Makrīzī, *al-Khitāt*, 2nd ed. IV, 6; Abu-l-Mahāsīn I, 76; Lane-Poole, *The Story of Cairo*, p. 42. The same is true of the *Jāmi'* al-Askar, the second mosque built in Cairo.

² *Tij al-'Arūs* V, 411: *ومغار بيت النصارى كجوهرة كجوهرة بيت النصارى*... سميت لدقة رأسها وقال سيبويه الصومعة من الأصم للراهب... الصومعة منار الراهب; Lisān X, 76: *يعنى المتحد الطرف المنضم والصومعة المنارة وهى فى* Zain al-'Abidin, *al-Baḥr al-Rā'ik*, p. 268: *الاصل متعبد الراهب ومن المجاز قولهم للثريدة اذا رفع وسطها وحدد راسه ودقق الصومعة يقال لا تهوّر الصومعة وجاؤا بثريدة مصمعة وجاؤا عليهم الصوامع والصومعة: i. e. a sort of cloak: so, also, al-Jauharī s. v.: كجوهرة بيت النصارى لصومع لدقة فى رأسها والعقاب لارتفاعها ولا اكراه ان ينطوى* In some traditions, the word is used for the place of the Muezzin; al-Sarakshī, *al-Masbūt* I, 138: *والبرنس وذروة الثريد* and cfr. Idrīsī, ed. Dozy and de Goeje, 139. 9.

³ Georg Hoffmann (*Z. A.* IX, 336) connects with it the word *زوبعة* "a whirlwind of dust". Similar formations are discussed by al-Ši'ūṭī, *Muzhir* II, 77.

⁴ Ed. Hoffmann, No. 968.

⁵ Ed. Duval 221, 26. Al-Kindī, in his account of 'Ain Shams, says that the figures upon the obelisks are covered by a *صومعة*; which, of course, can mean only "a pointed hat" or "tapering hood" (Oestrup in *Bulletin de l'Acad. Royale de Danemark*, 1896, No. 4. p. 200) whence the

the Syriac *estōnā* by *ṣauma'ah*; and when the Caliph al-Walid mounted up to the southern tower of the great Church in Damascus before demolishing it, he found a monk living there in a sort of hermitage (*sauma'ah*), which he refused to leave.¹ In the twelfth century the traveller Ibn Jubair found the custom still prevalent; a Mohammedan anchorite inhabited the western minaret,² which place the philosopher al-Ghazālī used as a retreat. It is only in the Maghreb that the term *ṣauma'ah* remained in use among the Mohammedans.³ Ibn Abi Zar' in his description of the mosque of the Kairuanese at Fez uses it interchangeably with *manūrah*.⁴ It has gone over into Spanish as "zoma".⁵

Nor does it seem that all mosques, even in later times, had minarets;⁶ and the historians of architecture go too far when they describe them as necessary parts of the building. Al-Nu'aimī, who lived in the fifteenth century (or his epitomizer), in his description of the city of Damascus,⁷ gives us a more or less complete account of two hundred and one mosques; to which he adds twenty-eight by name only. He is very careful to mention the peculiarities of each building. But only twenty of the whole number are said to have had minarets. It is difficult to imagine that he makes mention of the fact only when the minaret was in some way noteworthy:

note has gone, through Ibn Zūlāk, into Yāqūt III, 763, and from here into al-Makrīzī I, 31, al-Kazwīnī I, 149 and indirectly into al-Sīfātī, *Husn al-Mukhāḍarah* I, 32. Ibn Iyās (in Arnold, *Chrestomathia* p. 56) has صومعة for قلنسوة.

¹ Al-Nu'aimī, *Tanbih al-Tūlib* in *J. A.* ix Ser. VII, p. 189; Muḥammed ibn Shākir, *Uyūn al-Tawarikh* in Quatremère. *Histoire des Mamlouks* II, p. 264. On al-Walid's activity in building mosques, see de Goeje, *Fragmenta* pp. 4, 3; 12, 7.

² Ed. de Goeje p. 266, 19; Fr. Schiaparelli p. 257.

³ W. and G. Marçais, *Les Monuments arabes de Tlemcen* (Paris 1903), p. 45.

⁴ الانيس المطرب ed. Tornberg, pp. 30-32.

⁵ P. de Gayangos, *History of the Mohammedan Dynasties in Spain* I, notes p. 499; though this is doubtful. The word was entered in the first ed. of Engelmann. *Glossaire des Mots espagnoles* (Leiden 1861) p. 99, but it is omitted in the second ed. (1869) by Dozy.

⁶ Therefore, if there is no minaret, the *adhān* is to be recited at the door; al-Ramlī, *Nihāyat al-Muhtāj* (Cairo 1886) I, 305: *لَوْ لَمْ يَكُنْ لِلْمَسْجِدِ مَنَارَةٌ سَمِعَ أَنْ يُؤَذَّنَ عَلَى الْبَابِ*.

⁷ See Sauvaire in *J. A.* ix Ser. VI, 409 et seq.

for, in most cases, the mere fact is adduced or the additional note that it was made of wood or was recently constructed. The conclusion to be drawn is that out of the large number of mosques in the city, only very few were provided with minarets.

In the same manner at Jerusalem, neither the *Kubbat al-Sakhrā* nor the *Masjid al-Aḥsā* had a minaret; the style of their architecture, of course, made it impossible. At a later time, four were added on the Haram area. The only author that seems to mention them is Mujir al-Dīn (a late writer of the fifteenth century), who asserts that those that were to be seen at his day occupied the same position as did their predecessors during the reign of 'Abd al-Malik (72 A. H.).¹

The origin of the minaret is not apparent at first sight. Franz Pascha, in his "Baukunst des Islam"² sees no connection with the architecture of any other faith or race: "Ohne Vorbild wurden die Minarete . . . erfunden"; with which Pool is³ in substantial agreement: "With Christians, bells doubtless led to the idea of towers, and with Moslems the call to prayers by the human voice led to minarets". Schwally,⁴ however, looks for some outside influence, but does not find it: "Wahrscheinlich sind die Muslime nicht von selbst auf diese Gebetstürme verfallen. Aber wo sind die Vorbilder, durch die ihre Architekten oder Bauherren bestimmt wurden, zu suchen?"

From what has preceded it is evident that the idea of the minaret arose during the 'Umayyad dynasty and in Syria. In part, it was copied from the towers of the Christian Churches. Whether the *ṣawāmi'* which Mu'āwiyah ordered his lieutenant in Egypt to build on the mosque of 'Amr, were towers of any pretensions, we know not. But the suggestion of a tower as the place from which the call to prayers was to be made, or as belonging to a religious edifice seems to have come from the great church in Damascus which al-Walīd finally turned into a mosque. Mohammad ibn Shākir says expressly⁵ that

¹ *Uns al-Jalīl* (Cairo 1283), p. 379.

² *Handbuch der Architektur*, 1886, II, 17.

³ *Studies in Mohammedanism*, 1892, p. 336.

⁴ *Z. D. M. G.* LII, 144.

⁵ Quatrèmere, *Histoire des Mamlukes* II, 273; *J. A.* 1896, ix Sér. VII, 423. In fact "at each angle of this temple there was a small tower erected

the western and eastern minarets existed a long time before the days of al-Walid. Al-Walid built the northern one called *ma'dhanat al 'Arūs*, after a favourite designation of the city as "the bride of the world".¹ What these towers had been used for is not certain; the variations in Mohammedan traditions seem to evidence this uncertainty. The one upon which al-Walid mounted is said to have been called *al-Sā'ah*, which would suggest a clock tower. Yaḳūt has the tradition that this same minaret was originally a fire-temple and that a flame rose up from it into the air.²

But there was a more general influence at work, of which the towers on the Damascus church are only one expression. The earlier explorations of de Vogüé and the more recent ones of the Princeton expedition to Northern Syria leave little doubt that the Church at Damascus merely followed, in respect of its towers, an older Syrian and (we may add) Mesopotamian tradition. In the basilica of Taḥḥa, which competent authorities date from the fourth and fifth centuries, de Vogüé sees the transition from the Roman basilica used for civil purposes to the Christian Church: "to the right of the façade", he says, "there is added a tower in three stages"—a style of architecture common in the Ḥaurān.³ One has only to study the construction of the other Syrian Basilica—e.g. at Ḥāss (fourth century),⁴ at Kaṣr al-Banāt (fifth century),⁵ of Kalb-Luzeh and Termānīn (sixth century) to see here the origin of the church steeple.

This Syrian and Mesopotamian tradition leads us back—of course—to the Ziggurats of the old Babylonian and Assyrian shrines. With regard to the Syrian Christians, the evidence is not more direct than that sketched above. Even if such Ziggurats had been standing in their day, they were too fervent anti-idolaters to have adopted anything as specially heathen as a Ziggurat would have appeared to them. In building towers they merely followed the architectural tradition as it

by the Greeks for astronomical purposes"; Guy le Strange, *Palestine under the Moslems*, p. 230.

¹ Muḳaddasī, p. 159.

² II, 596.

³ *La Syrie Centrale*, I, 57; Butler, *The American Archaeological Expedition to Syria*, p. 409.

⁴ See illustration in Butler, *loc. cit.* p. 220; who, however, places it in the sixth century.

⁵ Butler, *loc. cit.* p. 156.

was current in the country; for such towers were not uncommon in other than religious edifices—in large houses and even in connection with funeral monuments.¹ It was different with the Mohammedans. They showed very little distaste to accept ideas, formulas, as well as architectural and other traditions from systems that had preceded them or were even their rivals. What originality Islam possesses lies more in the ethical and religious fervour which they imported into that which they borrowed. The proof of this, in the present connection, is to be seen in the two minarets of Samarra: the so-called Maulyyah and the minaret of the mosque of Abū Dulaf.

During the last two years, these have been the subject of careful investigation on the part of two travellers—the General de Beylié and Ernst Herzfeld. De Beylié's *Prome et Samarra*² is valuable especially because it gives us, in addition an observant description of the mosque of Abū Dulaf, about fifteen kilometres north of Samarra in the very heart of the desert, and which has, also, a helicoidal minaret. Herzfeld's work is³ strong on the historical and archaeological side. Herzfeld holds that the architects of al-Mutawakkil, in building the minaret of Samarra (850) followed a tradition which they had brought with them from Persia, and that this minaret goes back to the Ziggurat through Persian affiliations—more specifically through the celebrated Tīrbāl of Gōr or Phiruzābād. He seems to deduce this from the fact that this was the only Ziggurat at the time that had retained sufficient of its old form to serve as a model. The point must remain undecided. At least as late as the fourth century—as Herzfeld himself admits—Ammian mentions such a tower at the Nahar Malka near Ctesiphon and Zozimus knew of several at Bersabra, i. e. al-Ambar. The Borsippa tower which was described by Harpocriton in his *Cyranides* 365-355⁴ B. C. and which was in use under the Seleucid kings up to 296 B. C. was still recognized as a Ziggurat by the Jewish traveller Benjamin

¹ De Vogüé, *loc. cit.*; Kraus, *Geschichte der Christlichen Kunst* I, 308 speaks of these small towers as "die zu den Emporen führenden Treppen aufzunehmen."

² Paris 1907.

³ *Samara*, Berlin 1907. An illustration of the Samarra minaret can also be seen in Sachau, *Am Euphrat und Tigris*, p. 86.

⁴ De Miely in *Revue Archæologique*, 1900, p. 412.

of Tudela in the twelfth century.¹ That which distinguishes the Samarra minarets from the tower at Gōr and from the relics mentioned by the writers of the fourth century is the fact that it is helicoidal or round. Dieulafoy says expressly of the tower at Gōr² that "each of the stages is square and less in size than the preceding one". Ammian compares the tower at the Nahar-Malka with the Pharos at Alexandria, which evidently was not purely helicoidal. The idea that is peculiar to them all is that of a tower with an outside ramp; and it seems evident that we must look for the original of both the helicoidal and the square or staged tower in the Babylonian Ziggurat.

It must, however, be confessed that cogent proof of this statement can not at present be given. Herzfeld believes that the Ziggurat was simply a massive pile of bricks with an outer ascending ramp and that the Babylonians and Assyrians did not build what we are accustomed to call "staged-towers". He also holds that they were not merely portions of the Temple proper or adjunct to it; but that they also served as fortresses and were used for astronomical purposes. But it seems to me that he is mistaken in his interpretation of what evidence we have regarding the Ziggurat. When one commences to sift that evidence, it becomes surprisingly meagre; and we can reasonably doubt whether—as is currently believed—every temple had a Ziggurat. The following, however, seems to me to be sufficient to prove that the Ziggurat was indeed a stage-tower.³

a. The ruins of the so-called "observatory" at Khorsabad. This is distinctly stated to contain evident traces of three stages and a part of a fourth—each stage receding from the one below it.⁴

¹ *J. Q. R.* XVII, 519.

² *L'art antique de la Perse*, IV, 52.

³ I have omitted those remains that have not been definitely examined; e. g. at Kalah Shergat—"Trümmer etwa von einem Tempel, einem Stufenturm oder einem anderen monumentalen Bau"; Sachau, *Am Euphrat und Tigris*, p. 113.

⁴ On the authority of Place, Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, II, 403. At Assur the height neither of the older towers nor of that of Shalmanezar II can now be determined; W. Andrae, *Der Anu-Adad Tempel in Assur* (Leipzig 1909), pp. 13, 64—though in the reconstruction four stages are given.

b. The ruins of the stage-tower at Borsippa brought to light by Sir Henry Rawlinson. Three stages are said to be clearly defined. Hilprecht speaks of the "six or seven stages still to be recognized";¹ but upon what authority, I do not know. Its Babylonian name was E. UR. IMIN. ANKI, which Sumeriologists translate either as "Temple of the seven planets of Heaven and Earth" or "Temple of the seven directions (spheres) of Heaven and Earth" (*bit sibitti hammamē šamē u'irsitim*).² The name, however, need not necessarily stand in any relation to the architectural features of the tower or Ziggurat.

c. At Mughayyar Loftus³ seems to have found traces of two storeys of the Ziggurat, though his description is not at all clear. The second storey "recedes several feet from the lower wall", though it is closer to the edge of the first at its North-West end than at the South-East. He speaks of a gradual stepped incline between the two storeys, though its connection with the entrance in the lower storey is not defined. Taylor⁴ describes a staircase, three yards broad, leading up to the edge of the basement of the second storey; but no further traces appeared. There seems to be no positive evidence that we are at all in the presence of a Ziggurat.

d. For Birs Nimrūd we are dependent upon the general description given by Rich,⁵ who saw traces of at least four stages, each one receding from the one below. No mention is made of a rampart.

e. At Abu Sharain, also, there is little positive evidence of a Ziggurat. There is a large basal substructure upon which some edifice has been erected, and to which an inclined plane led up⁶. Too little has remained of the upper part to determine its character.

f. At Tell-Loh the excavators are said to have found the remains of some sort of a building with terraces receding one

¹ *Explorations in Bible Lands*, p. 184.

² Schrader, *K. A. T.*³ p. 616. Langdon, *Building Inscriptions of the New-Babylonian Empire* I, 57 translates: "House of the oracular deity of the seven regions of earth and sky".

³ *Travels and Researches in Chaldaea and Susiana*, p. 128.

⁴ *J. R. A. S.* XV, 261.

⁵ *Babylon and Persepolis*, p. 167.

⁶ Taylor in *J. R. A. S.* XV, 404.

from the other.¹ It is quite doubtful whether this is part of a Ziggurat at all.

g. At Nippur Hilprecht assumes that there was a Ziggurat of five stages, but no reason is given for this assumption; and I am not aware that the special monograph on the subject "E-kur, the Temple of Bêl at Nippur" has ever been published. He confesses that very little is left of the higher stages of the Ziggurat of Ur-Gur.² Haynes found only considerable remains of a sloping second terrace. Peters, however, thinks that there is sufficient warrant for supposing an original Ziggurat of two stories, upon which Ur-Gur built one of three.³ He confesses, however, that the two upper stages of Ur-Gur's Ziggurat "were so ruined by water that it was difficult to trace or restore them".⁴ Of the supposed causeway, only so much was found as lead up "to the top of the first terrace of the Ziggurat".⁵

h. At Bismaya, too, the results have been very unsatisfactory and hardly warrant the supposition that traces of a real Ziggurat have been found. According to Banks,⁶ the small amount of the rubbish in the place in which it is supposed to have been would warrant, at best, the conjecture of a Ziggurat of two or three stages. In fact, not more than one stage, in reality, was found with a flight of steps leading up and this may be nothing more than an elevated platform for some building. Further down in the so-called plano-convex temple, the base only of some building was unearthed: nothing compels us to hold that this was part of a temple-tower.

i. The so-called Tîrbâl of Jaur or Gôr (Firuzâbâd). Herzfeld represents this to be also merely a tower "von quadratischem Grundriß mit äußerer Wendelrampe". But Dieulafoy, who has examined the ruins minutely says distinctly that the tower "is composed above the platform, of four stages . . . Each stage is square and recedes from the preceding one by a space equal to $\frac{1}{10}$ of the base".⁷

j. The account of the temple of Bel at Babylon given by Herodotus⁸. Whatever value we may place upon his trust-

¹ Perrot and Chipiez, *Histoire de l'art dans l'antiquité*, II, 398; Hilprecht, *loc. cit.* p. 232.

² *Loc. cit.* p. 374.

³ *Nippur*, II, 122, 124.

⁴ *Loc. cit.* p. 162.

⁵ *Loc. cit.* p. 147-8.

⁶ *A. J. S. L.* 1905, pp. 30-32.

⁷ *L'art antique de la Perse*, IV, 79, 85.

⁸ I, 180.

worthiness, there can be no doubt of the idea that he intended to convey. After mentioning the first tower, he speaks of an ἄλλος πύργος = another tower having been erected upon this first one (ἕτερος, i. e. πύργος), and so on up to the eighth.¹ He would hardly have described each one of these as an individual tower, if the whole had been one massive structure. Harpocriton, also, mentions three towers superimposed as still standing in his days; and he did not regard it as one single tower.² And finally, Benjamin of Tudela, though much too succinct in his account, speaks of the outer rampart as if it were not continuous: ובין עשרה ועשרה אמות דרכים ובהם שם עולים בעינול "and every ten cubits there are ways (or slopes), by means of which one goes in a circle, encircling it until one reaches the top".³ He seems evidently to have a stage-like arrangement in mind. Unfortunately it is impossible to verify these statements. The bricks have all been carried off to be used in other buildings; and all that remains to mark the spot is a depression called by the Arabs *al-ṣaḥn*. "the bowl".⁴

k. Representations in Babylonian and Assyrian art; two of which only have come down to us: the representation on the so-called Loftus boundary-stone and the relief from the wall of the palace of Sargon at Nineveh. The first of these Herzfeld ignores entirely; yet there can be little doubt as to the stage character of the tower it is meant to represent.⁵ As regards the second, Herzfeld⁶ is at pains to prove that it does not represent a Ziggurat at all; but his argument is not at all convincing. The rather crude manner in which the Assyrian artists expressed themselves need not deter us from seeing in the two curves that flank the portal an attempt to picture the inclined planes of a Ziggurat. Herzfeld suggests that they represent two towers; but then there would be no reason for the curves. And the portal reminds us of a similar portal which is part of the Tīrbāl of Gōr, as described by

¹ Zehnfund, *Die Wiederherstellung Nineves* (A. O. V, 4; 1903) p. 23 speaks of six stages; but does not give his authority for the statement.

² *Revue Archæologique*, 1900, p. 412 et seq.

³ Adler's translation, *J. Q. R.* XVII, 527; *The Itinerary of Benjamin of Tudela* (1907), p. 43 is not quite exact.

⁴ Hilprecht. *loc. cit.* p. 553.

⁵ See e. g. Hommel, *Babyl. Assyr. Geschichte*, p. 19; Hincke, *A New Boundary-Stone of Neluchadrezzar I from Nippur*, Phil. 1907, pp. 17, 239.

⁶ *Loc. cit.* p. 27.

Dieulafoy: "on passait d'abord sous une porte signalée actuellement par les naissances d'un arceau de 60 cm. d'épaisseur, puis on s'engageait sous une galerie recouverte d'un berceau en partie conservé".¹

A reminiscence of the Babylonian stage-tower may also be seen in the stories told about the famous tower in the castle of Ghumdān in Ṣan'ā. The ordinary report was that it was seven stories high; i. e. that it had seven stages;² though al-Hamdānī, in his *Iklil*, is certain that it had twenty, and not seven, stories.³ A glance at the picture of the castle given in the *Corpus Inscriptionum Semiticarum*⁴ will show how the mistake arose. The rock has evidently been built upon in terrace-like formations.

The evidence here adduced does seem sufficient to permit the view that real stage-towers did exist in connection with Babylonian and Assyrian temples. But it may be wrong to assume that these were the only kind of towers constructed there. The two round towers in the mosques of Samarra and Abū Dulaf seem to point to the possibility that some of the Babylonian Ziggurat may have been built in a similar round form.

It is, however, in another part of the Mohammedan world that we are able to trace the further influence of the old Mesopotamian tradition. All through the Middle Ages, Egypt stood in close connection with Irāk and with Persia: until the Ottoman Turks brought the influence of Constantinople to bear upon the land of the Nile. The great centres of literary and of artistic development in Irāk made their influence felt in

¹ I am not able to follow Jeremias in attributing a cosmic character to the Ziggurat; *Das Alter der babylonischen Astronomie*, 1908, pp. 32-34. Max von Oppenheim, *Vom Mittelmeer zum Persischen Golf* II, 240, speaks of the tower of 'Akar ('Akr) kūf, to the north-west of Bagdad as a relic of the Babylonian period (cfr. also, Niebuhr, *Reisebeschreibung* II, 305; Rich, *Narrative of a Journey to the site of Babylon*, p. 80; Ker Porter, *Travels*, II, 275; Layard, *Nineveh and Babylon* p. 476). But Peters, *Nippur*, I, 188, 354, is probably right in holding that it does not contain the remains of a Ziggurat. The Arabic legends in regard to its origin can be read in Ṭabarī II, 917 etc.; Yāqūt I, 863; al-Hamadhānī pp. 196, 210; *Hamzae Ispahanensis Annalium Libri* X, ed. Gottwaldt, p. 35.

² Yāqūt III, 811; al-Kazwīnī II, 33. Cfr. Caussin de Perceval, *Essai* I, 75.

³ D. H. Müller, *Die Burgen und Schlösser Südarabiens* I, 13, 15, 56.

⁴ Vol. IV, I. Tab. 1.

the land which has so seldom been ruled by men of its indigenous races. One of the earliest monuments of Arab architecture is the mosque of Ibn Ṭūlūn in Cairo.¹ There can be little doubt of the connection of its "corkscrew tower" on the one hand with the Pharos² in Alexandria, on the other with the minaret of Samarra. We can have some correct idea of the form of the Pharos from the description left us by Arabic writers, from a mosaic in St. Mark at Venice (twelfth century) and from a curious representation found in some manuscripts of two noted Arabic writers—Yāḳūt³ and al-Ḳazwīnī.⁴ It was of three storeys; the first square, the second octagonal and the third round.⁵ The minaret of Ibn Ṭūlūn, also, has three storeys, but the forms of the second and the third are reversed. Now, it is quite possible that in building his minaret, Ibn Ṭūlūn was partly inspired by the Pharos at Alexandria. We know that he repaired it and added a *Ḳubbah* or dome on the top.⁶ But there is a distinct tradition, upon the authority of al-Ḳudā'ī (died 454-5 A. H.) that Ibn Ṭūlūn fashioned both his mosque and its minaret

¹ See e. g. Coste, *Architecture Arabe*, plate XXXVII; Lane, *Story of Cairo* p. 73; K. Corbet, *The Life and Works of Ahmad ibn Ṭūlūn* in *J. R. A. S.* 1891, p. 527; De Beylié, *Prose et Samara*, p. 122; Saladin, *Manuel d'art Musulman*, I, 81; Kaiser and Roloff, *Ägypten Einst und Jetzt*, 1908, p. 199. Lane-Poole, *A History of Egypt*, p. 65 adds "Architects, however, throw doubts on the antiquity of Ibn Ṭūlūn's minaret"; but no arguments are adduced.

² Alfred H. Butler was the first to suggest that the Pharos served as a model to the workmen of Ibn Ṭūlūn; see *Academy*, Nov. 20. 1880; *Arab Conquest of Egypt*, p. 398. Van Berchem (*Corpus*, p. 481) holds the same view. On the other hand, Herzfeld (*loc. cit.* p. 35) thinks that the Pharos was rebuilt in accordance with the form of the minaret of Ibn Ṭūlūn. ³ I, 263. ⁴ II, 98.

⁵ Hardly four, as Butler, *Arab Conquest of Egypt*, p. 391 asserts. See *Khīṭāṭ*, 2nd ed., I, 254. The earliest coins containing a representation of the Pharos are dated in the year 15 of Domitian, i. e. 80 A. D. Here it has in reality only two stages, seemingly square. On the coins of Commodus the representation is strictly conventionalized: three round towers superimposed. See E. D. J. Dutilh in *Bulletin de l'Institut Egypt.* 1897, p. 24. Herzfeld (*loc. cit.* p. 33) suggests that the form of the Pharos itself is not Greek, but that it was inspired by Babylonian precedents.

⁶ *Khīṭāṭ*, 2nd ed. pp. 253, 254 (cfr. al-Sī'ūṭī, *Husn* I, 44). The text is not quite plain: "Ahmad ibn Ṭūlūn made some repairs in it and placed on the top a *Ḳubbah* of wood, that whoever entered it (the *manīrah*) might be able to go to the top. It was spacious, but without a stairway".

after those of Samarra. There is little reason to doubt the correctness of this tradition, or to call it—as Herzfeld does—“Geschichtskonstruktion”. Al-Ḳudāʿī stood in high renown among Mohammedan historians of Egypt,¹ and his work was used liberally by all who have written on the history and the antiquities of the country. Aḥmad ibn Ṭūlūn had spent part of his youth in Samarra;² and when he succeeded in swinging himself upon the throne of Egypt, he kept up connection with his friends in that city.³ It was with him that commenced that artistic influence of Mesopotamia in Egypt which had formerly belonged to Syria. It was one more avenue opened through which that artistic influence of late oriental civilization was to affect the early Middle Ages, on which Strzygowski has dwelt so often.⁴ And one is tempted to see both in the Pharos and in the minaret of Ṭūlūn nothing more than a combination of the square or angled Ziggurat and the round one that has been presupposed in order to account for the Samarra towers.

But in one important particular the minaret of Ibn Ṭūlūn differed from the Pharos; and here we must see the direct influence of Mesopotamia. In the Pharos, the ascent was covered and was, therefore, an integral part of the building. Yākūt says “It has a wide stairway which a horseman can ascend with his horse”;⁵ “The ascent is roofed over⁶ with slabs that rest upon the two walls that enclose the staircase. One mounts up to an elevated platform with encircling battle-

¹ See Becker, *Beiträge zur Geschichte Ägyptens*, I, 20; idem in *Z. A. XXII*, 430; N. A. Koenig, *The History of the Governors of Egypt by al-Kindi* (N. Y. 1908), p. 23. Strzygowski (*Jahrbuch der Königl. Preuss. Kunstsammlungen*, 1904, p. 246) also accepts the testimony of al-Ḳudāʿī.

² Tabarī III, 1670; Vollers, *Fragmente aus dem Muḡrib des Ibn Saʿīd*, p. 7; Abul-Mahāsīn II, 6.

³ Vollers, *loc. cit.* p. 47, 15.

⁴ *Loc. cit.* p. 237. Cfr. René Dussaud, *Les Arabes en Syrie avant l'Islam* (Paris 1907), p. 45. On the general question, see Migeon, *Manuel d'Art Musulman* II, 71, 102, 459 et seq.

⁵ Consequently, there were no steps. Ibn Khurdābeh, *Kitāb al-Masālik*, (ed. de Goeje) p. 114, 16 has بغير درج, which reminds him of the ascent in the minaret of the Samarra mosque. Masʿūdī has the same expression; and the doubt of Butler (*Arab Conquest of Egypt*, p. 392, note 2) “it does not seem quite clear whether there were actual steps or an inclined plane for mounting the tower”, is not justified.

⁶ Yākūt has سقفت and not the unintelligible سقت of al-Ḳazwīnī.

ments, from which one has an outlook over the sea. In this there is a space as if it were a square tower which one ascends by another series of steps unto another place from which one can look down upon the roof of the first. It is also surrounded by battlements. In this space there is a pavilion like a watchman's cabin". That he is speaking here of an inner staircase¹ is plain from his statement a little further on that this staircase winds around "something like an empty well"—a fact that is also reported by the Chinese author of the thirteenth century Chao-Yu-Kua in his ethnographic work *Chu-fan-chah*: "in the middle of the tower there was a spring".² Idrisī (twelfth century) says explicitly: "one mounts by means of a wide staircase, constructed in the interior, just as is the custom in mounting mosques".³ The minaret of Ibn Ṭulūn, however, has its ascent outside, in the form of a rampart, just as was the case with the Ziggurat.⁴ The persistence of this tradition in Mesopotamia itself is seen in the tower built at Bagdad by the Caliph al-Muktafi in the eleventh century (the *Kubbat al-ḥimār* or "Cupola of the Ass") "ascended by a spiral stair of such an easy gradient that the Caliph could ride to the summit on a donkey trained to an ambling gait".⁵

The combination of the square or angled base surmounted by a circular tower remained the predominant type of the Egyptian minaret; though the ascent has been placed inside. This general character, of course, admitted of certain variations. The minaret upon the tomb-mosque of Kalā'ūn is made up of a square base, surmounted by another square retrocessing and by a circular top; that on the tomb-mosque of Barḳūk

¹ Hirth, *Die Länder des Islām nach chinesischen Quellen*. Supplément au Vol. V du *T'oung-Pao*, Leiden 1894, p. 53.

² *Description de L'Afrique*, p. 139.

³ Van Berchem, Saladin and de Beylié have correctly described the Pharos as telescopic in form; while the minarets at Samarra and Abū Dulaf are helicoïdal. See *Prome et Samarra*, p. 115, note.

⁴ Guy le Strange, *Bagdad during the Abbasid Califate*, p. 254. A similar tower "up which four horses could be driven" is mentioned by Chao-Yu-Kua as existing at Lu-Mei, which Hirth supposes to be Damascus. If this is so, the author must confound the tower to which he refers with some other—perhaps the Pharos itself, as de Goeje suggests: *loc. cit.* p. 47.

⁵ Coste, Plate IX; Saladin I, 112. Cfr., also, the minaret of al-Ghūrī, Coste, Plate XXXVI; Prisse d'Avennes, *L'Art Arabe*, plate XXVI.

of a square base, followed by a circular construction, and then by a round top resting on pillars.¹ Sometimes the circular part was broken into an hexagonal or an octagonal. The minaret on the mosque of al-Ḥasan has a square base surmounted by an octangular tower; which is followed by a second octangular tower; the whole surmounted by a top piece resting upon columns.² This is also the form of the minaret on the madrasah of Muḥammad ibn Naṣr. The minaret of the tomb-mosque of Kait-Bey has a square base that develops before the first stage is finished into an hexagonal. Upon this is a circular tower, surmounted by a round top resting on pillars.³ At other times the square base was broken as in the minaret of the mosque of al-Mu'ayyid, where it is hexagonal;⁴ or in that of the Azhar where it is also hexagonal—surmounted by a decagonal, and this is crowned by two towers that support the top piece.⁵

Both forms, the square and the round tower, have, however, persisted uncombined in various parts of the Moslem world; the cleavage is rather marked. The square minaret persisted in Syria⁶ (whenever Egyptian influence was not at work), as can be seen in the "Ma'dhanat al-'Arūs" in the Cathedral mosque at Damascus⁷ and even in the general character of the "Minaret of Jesus" there. That of the mosque of Zakariyya (the cathedral mosque) at Aleppo is a simple square all the way up.⁸ The Umayyads carried this form into Spain; the most noted example to day being the Giralda at Sevilla,⁹ which has been copied faithfully in the tower of the Madison Square Garden of New York City. It was also carried into Africa, where, to this day, the usual form of the minaret is square. Witness the Jama Zaitoun at Tunis, the minaret of the Kalaā Beni Ḥammad (the Berber capital of North Africa); the Katubia in Morocco, the Mosque at Oran or the Maṣṣurrah

¹ Coste, Plate XIV.

² E. T. Rogers and Miss Rogers in *Art Journal*, 1880, p. 77.

³ Coste, Plate XXXII.

⁴ Coste, Plate XXXI; Saladin I, 144.

⁵ Coste, Plate XXXVII.

⁶ Muḥaddasī (ed. de Goeje), p. 182.

⁷ Saladin I, 72. The top of the "Minaret of Jesus" is evidently a later addition.

⁸ Saladin I, 105.

⁹ Saladin I, 232; Adolf Fähr. *Grundriß der Gesch. der bildenden Künste*, p. 280; Lübke, *Gesch. der Architekt.*, p. 81; W. and G. Marçais, *Les Monuments Arabes de Tlemcen*, p. 45.

at Tlemcen.¹ Only in a few cases, as at Hamonda Pasha in Tunis, is the absolute square broken into a hexagonal.

On the other hand, the round minaret is generally found in Mesopotamia and the countries further east.² Some of the great mausoleums, it is true, seem to represent an angular base surmounted by a short,³ pointed tower—such as the tomb of Zubaidah the wife of Hārūn al-Rashīd near Bagdad with its pyramidal stalactite top or the tomb of Ḥasan al-Baṣrī at Zobair near that same city, with its tower curiously formed of eight stages in telescopic arrangement.⁴ Nor are peculiar forms wanting; e. g. the minaret in the Sūḵ al-Ghazāl at Bagdad,⁵ which though round increases in width towards the top where it finishes in a beautiful stalactite top (similar to the minaret at Amadiēh⁶), or the minaret at al-Ānah with its eight regular storeys,⁷ which reminds one forcibly of some of the towers recently found at Axūm.⁸ In some cases, but at a later period, the round form was frankly discarded—as in the minaret of the Bibi Khanūm at Samarcand⁹—that noble structure erected by Tīmūr to his much-beloved wife—which is octagonal in form, or in that of the Royal Tekiē at Teheran, which is square.¹⁰ But in general, one will find round minarets of one sort or another from Mesopotamia up to the confines of China. There is, of course, much variety in the details of these round minarets, and their architecture has been affected by local taste and racial traditions. The Minār Kalān (the great minaret) at Bokhara is an immense structure “36 feet at the base and tapering upward to a height of 210 feet”.¹¹ At times a sort of spiral is worked into the tower, as at the Imperial mosque of Ispahan,¹² or at the “Gūr Amīr”, the mausoleum of Tamerlane. In the Minar of

¹ Saladin I, 198, 217, 224, 228 etc.

² Saladin I, 289.

³ Saladin I, 320; de Beylié, *Prôme et Samarra*, p. 32.

⁴ *Revue du Monde Musulman* VI, 645.

⁵ De Beylié, *Prôme et Samarra*, p. 48.

⁶ Binder, *Am Kurdistan*, p. 207.

⁷ *ibid.*, p. 69.

⁸ *Jahrb. des Kaiserl. deutschen Archäolog. Inst.* 1907, pp. 45, 46. Cfr. *Am. Journ. of Archaeol.* XI, 340.

⁹ Skrine and Ross, *The Heart of Asia*, p. 392.

¹⁰ *Revue du Monde Musulman* IV, 483; Jackson, *Persia Past and Present*, p. 417.

¹¹ Skrine and Ross, *The Heart of Asia*, p. 374.

¹² Saladin I, 397.

the Kutab mosque at Delhi, the smooth surface is broken by projecting ribs which form flutes which are alternately angular and circular up to the first storey;¹ circular in the second and angular in the third. The fourth storey is plainly round.² It is this round form, though much smaller in circumference, that has been adopted by the Turks and which they evidently learned in Mesopotamia. It is this style that is found, again with very few exceptions, in Constantinople and the Balkan Peninsula.³

But it is not only in Mohammedan countries that the idea first expressed in the Babylonian Ziggurat has survived. I should not like to be misunderstood as falling in with the Babylonian exaggerations of some of our most learned Assyriologists and of seeing everything through spectacles coloured by the grandeur of the antique world. But in matters of art and of architecture especially, the borrowings and the influences have been so numerous, that one civilization may be said to stand upon the shoulders of its predecessor. It is a well-known fact that the early Christian basilica had no towers attached or superposed. The same is true of the earliest Byzantine churches in Italy—the classic home of the campanile. Even to this day there are none attached to the cathedral of Parenzo (535-543), of Prado (571-586) or to that of San Lorenzo at Milan (6th century), which are among the earliest examples of church architecture in the West. It is true that some of the old Italian churches have at present campaniles adjoining. This is the case with a number of the Ravenna churches—the Basilica Ursiana. Sant' Apollinare

¹ Ferguson, *History of Indian and Eastern Architecture*, p. 505. A similar method is employed in many of the grand palaces of Mesopotamia and in the Minar, or lighthouse at Beni Hammad in North Africa. See De Beylié in *J. A.* XII (1900) p. 197.

² Ferguson, *loc. cit.* John J. Pool, *Studies in Mohammedanism* (1892) p. 336 "It is not exactly a minaret, that is to say, it is not now, if it ever was, connected with a mosque, but it is a lofty turret or tower which is called a minar".

³ One might go still further and examine the connection that exists between the Babylonian Ziggurat and the stage-temples found in Turkestan, at Turfan, Astana and Syrchab (Grünwedel, *Bericht über archäologische Arbeiten in Idikutschari und Umgebung in Abhandl. Phil. Philol. Klasse der Bayer. Akad.* 1906, p. 49; Regel in *Petermann's Mitteil.* for 1879, 1880 and 1881); but such an examination would be foreign to the scope of the present paper.

Nuovo, Sant Apollinare in Classe. San Vitale is even surmounted by two towers. It must be noted, however, that the towers on San Vitale are not campaniles in the true sense of the term, but merely means for reaching the gallery.¹ As regards the campaniles themselves, all authorities agree that though the main edifices of the churches are of the fifth and sixth centuries, the campaniles were erected at least two centuries later.² The dating of the campanile is in no way affected by the undoubted fact that the bell was used in connection with early Christian churches. Gregory of Tours, towards the end of the sixth century, seems to be the first to mention it as part of the church paraphernalia.³ The Chronicle of the abbots of Fonteinelle, speaking of the years 734-738, mentions the "Campanum in turricula collocandum ut moris est ecclesiarum".⁴ Some of the belfries (e. g. of St. Satyrus) are supposed to be as old as the sixth century.⁵ But belfries are not towers. The oldest campaniles are supposed to date from the beginning of the ninth century—those of Santa Maria della Cella at Viterbo and Sant Ambrogio at Milan: though that of Sant Apollinare in Classe is held by some to be of the eighth century.⁶ The campanile of Sant' Apollinare Nuovo is however reliably dated between 850 and 878.

It is therefore a pertinent question—whence did this addition to church architecture come? The writer of the article "Kirchenbau" in the *Protestantische Real-Encyclopädie*⁷ is of opinion that it was an original conception both in Italy and in the Frankish Empire, and that it had no connection whatsoever with the East. I understand this to be also the meaning of Adolf Fähr's words: "Ein neues Element bilden

¹ " . . . le torri della basilica di San Vitale, dalla muratura sincrona ad essa, furono erette per dare accesso alla gallerie superiore"; Venturi, *Storia dell' arte Italiana* (Milan 1902) II. 160.

² G. T. Rivoira, *Le origini della architettura Lombardica* (Rome 1901), I, 49 et seq.; Venturi, *loc. cit.*; Ch. Diehl, *Ravenne* (1903) p. 48.

³ Venturi, *loc. cit.* II, 149; *Protest. Real-Encycl.* VI, 704.

⁴ Cited from Eulart, *Manuel d'archéologie française* p. 174 in Arthur Kingsley Porter, *Mediaeval Architecture* (N. Y. 1909) I, 81, note 3.

⁵ Raffaele Sattaneo, *Architecture in Italy* (London 1896) p. 255.

⁶ Dehio and Van Bezold, *Die kirchliche Baukunst des Abendlandes*, I, 135.

⁷ X, 786.

die meist kreisrunden Türme".¹ But one might well ask in return—if they were not necessary as belfries, what purpose did they serve? In Ravenna they could hardly be needed as towers of defence, since the whole city was enclosed by a wall. Nor could they be used as light-houses; for that purpose they were too far distant from the shore. It is certainly peculiar that the rise of the campanile or church tower synchronizes with the coming of the Arabs into the Mediterranean. The first Arab raid upon Sicily is said to have taken place in the year 701;² and though Sicily and certain parts of Southern Italy did not come under their direct rule until the Aghlabites were strong in Africa during the ninth century,³ Arab influence permeated the Eastern Mediterranean long before that. I do not know what authority there is for the statement that the columns for the basilicas at Ravenna were made in Istria by oriental workmen;⁴ but Ravenna was a great centre from which Oriental influences passed on into Europe—not only in art, but also in decoration, in mosaics, and in miniatur-painting as well.⁵ The basilica of St. Mark at Venice, supposed to contain the remains of the saint brought thither in 828 from Alexandria, is adorned with columns garnered in the East; and the campanile has an "ascent by a continuous inclined plane built between an inner and outer wall and turning with a platform at each angle of the tower" which reminds one at once of the ascent in the Pharos at Alexandria. Like the minaret, the campanile could be either round or square. Most of the early examples are round; but square ones are not wanting, e. g. at San Giovanni Evangelista, San Francesco and San Michele in Affricisco in Ravenna. And like the minaret,⁶ the campanile was at first not an integral part of the church building. It was generally placed near to it, sometimes even leaning upon it; until in the church

¹ *Grundriß der Gesch. der bildenden Künste*, p. 228.

² Weil, *Chalifen* I, 478.

³ Weil, *loc. cit.* II, 249; Müller, *Islam* I, 551.

⁴ Baedeker, *Italie Septentrionale* (1892), p. 301.

⁵ Ch. Diehl, *Ravenne*, pp. 107-109; Venturi, *Storia dell' Arte Italiana* II, 110, 127; Corrodo Ricci, *Ravenna* (Bergamo 1902), pp. 5, 7, 64.

⁶ Lane, *Cairo Fifty Years Ago*, p. 108 "... not otherwise connected with the mosque than by an arch, over which is a way to the terraces above the arcades".

spire it became almost a necessary part of every Christian place of worship.

It seems to me, therefore, that a possible explanation of the sudden appearance of the campanile in Italy during the eighth and ninth centuries, would be that they are due to Mohammedan influence. Whether this influence came from Egypt, or from Syria and Mesopotamia, or even from the Maghreb, is a point upon which I should not like to insist. But this much does seem to follow from a study of the history of the monuments, that the old idea of the Ziggurat or tower in some way connected with worship at a shrine has filtered down to us through the Mohammedan minaret and finds its expression to day in our church steeple.

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The Vedic Dual: Part I., The Dual of Bodily Parts.—By
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NEITHER native nor occidental grammarians have adequately defined the scope of the dual in Sanskrit, but both agree on the general strictness of its use. The great Pāṇini states the general rule for grammatical number with the utmost simplicity,—*bahuṣu bahuvacanam | dvyekeyor dvivacanāikavacane* (I. 4. 21f.), i. e.: In the case of many, the plural; in the case of two (or) one, the dual (or) the singular (is used). As regards the dual he appears to know only two exceptions. In I. 2.59, he states:—*asmado dvayoḥ ca*, or that the plural of the first personal pronoun may be used of two, and in the next section he adds:—*phalgunīproṣṭhapadānāṁ ca nakṣatre*, or that the plural may be used instead of the dual of the lunar mansions *phalgunī* and *proṣṭhapadā*. We may add that both of the Pāṇinian exceptions are found in Vedic.

Whitney (Sk. Gr. § 265) admits “only very rare and sporadic exceptions” to its strict use “in all cases where two objects are logically indicated, whether directly or by combination of two individuals.” Speijer (Sk. Syn. § 26) states:—“In all periods of the language the dual is the proper and sole number by which duality is to be expressed”. He thinks it not improbable that in the voluminous mass of Sanskrit literature sundry instances may be found of duality expressed by the plural number but he is confident that “the number of such exceptions cannot be but exceedingly small”.

Students of Vedic syntax, however, occasionally observing some of the phenomena to be presented in this study, have had an idea that this strictness of use was not as well maintained in the older period of the language. Professor Delbrück, for instance, in his *Altind. Syn.* (p. 102) asks: „Steht der Plural als allgemeiner Mehrheitskasus auch da, wo man den Dual zu erwarten hätte?“ and adds: „Es giebt unzweifelhaft im Veda Stellen, an welchen der Plural auffallend erscheint“.

The first instance he cites is that of RV. III. 33, which we notice here as it does not recur in the subsequent study. In

this hymn the two rivers, Vipāt and Ātudrī, are described in stanzas 1—3 in the dual. In stanzas 4, 6, 8 and 10, the rivers speak in the first plural, but this is an exception recognized in all periods of the language. (Cf. Pāṇ. *l. c.*; Speijer, *op. c.* § 25). In 5, 9, 11 and 12 they are addressed in the plural, a not uncommon mark of great respect in the later language, though Speijer (*Ved. u. Sk. Syn.* 10g.) pronounces it post-Vedic and post-Pāṇinian. In the closing 13th stanza the waters are addressed in the plural, naturally enough as *āpas* is *plurale tantum*. The latter half stanza returns to the dual as the address is dropped and the two rivers are compared to two bulls. Surely everything is normal enough, with the exception of the unusual plural of the second person in address in the Vedic. Had we plurals in the descriptive stanzas 1—3 and plural and dual transposed in 13, Delbrück might well have thought the numbers remarkable. He is still less happy in his citation of RV. IV. 38. 3, for he overlooks the fact that the *padbhis* belong to a horse, in which case the dual is hardly to be expected. The other instances he cites are fully considered in § 6 of the present study.

With truer insight Professor Bloomfield has long been of the opinion that for some reason or other the hieratic language of the RV. admitted the dual more freely than the Atharvanic or popular speech. This needed closer definition.

It was, then, to investigate the phenomena associated with the Vedic dual and to determine the extent of the supposed encroachments of the plural upon its domain that this study was undertaken. In its preparation all the dual substantives and adjectives, including participles, have been collected from the entire Rīg and Atharva Vedas. These have been grouped into several parts as follows: 1, The dual of natural bodily parts; 2, the dual in comparisons; 3, the dual of implemental pairs; 4, the dual of cosmic pairs; 5, the dual of conventional, customary or occasionally associated pairs; 6, the elliptic dual; 7, the dual dvandva compounds; 8, the anaphoric dual; 9, the attributive dual. These have been studied each as a unit and also in its relation to the others.

The present paper is concerned only with the first of these, the dual of natural bodily parts, for these have been the center of the doubt and the controversy. The study has for convenience of treatment been subdivided into seven parts, three

of which have to do with the supposed use of the plural for the dual. We shall consider first the duality of bodily parts, naturally dual, (a) when associated with an individual; (b) with a duality of persons; (c) with a plurality of persons:—and then a plurality of bodily parts, naturally dual, associated (a) with a plurality of persons; (b) with a duality of persons; (c) with an individual. The seventh section on a duality of naturally singular parts is added for completeness. The conclusions reached from the study of each section will be presented at the end of the section.

§ 1.

A duality of bodily parts, naturally dual, ascribed to an individual.

āṇsa, 'shoulder'. RV. 0—3—6 (§ 4)¹; AV. 1—6—0.

āṇsāu, RV. I. 158. 5^d, (*dāsāśya*); AV. IX. 7. 7, (*ṛṣabhāśya*); X. 2. 5^c, (*pūruṣāśya*); X. 9. 19^b, (*aghnyāśya*); XI. 3. 9, (*odanāśya*): *āṇsābhyām*, RV. X. 163. 2^c = AV. II. 33. 2^c, (*yakṣmīṇas*). See also § 2 (AV.) and § 3 (RV.).

akṣān, 'eye'. RV. 1—0—9 (§§ 4, 6); AV. 0—1—0.

akṣṇós, AV. XIX. 60. 1^b, (*mantrakṛtas*).

ākṣi, 'eye'. RV. 1—0—0; AV. 3—2—1 (§ 4).

ākṣiṇī, AV. X. 9. 14^b, (*aghnyāśya*); XI. 3. 2, (*odanāśya*).

akṣī, 'eye'. RV. 0—7—0; AV. 0—14—0.

akṣī, RV. I. 72. 10^b, (*divās*); I. 116. 16^c, 17^c, (*ṛjráçvasya*); X. 79. 2^a, (*agnés*):

akṣyāu, AV. I. 27. 1^d, (*paripanthinas*); IV. 3. 3^a, (*vyāghrāśya*); V. 23. 3^a, (*kumārāśya*); V. 29. 4^a, (*piçācāśya*); VI. 9. 1^b, (*vadhūyós*); VI. 9. 1^c, (*vṛṣanyāntyās*); XIX. 50. 1^c, (*vṛkasya*): *akṣībhyām*, RV. X. 163. 1^a = AV. II. 33. 1^a, (*yakṣmīṇas*); AV. XI. 3. 34^{ad}, (*odanādatas*): *akṣyós*, AV. V. 4. 10^b, (*takmagrhitāśya*); VI. 24. 2^a, (*ādyuttāśya*); VI. 127. 3^b, (*āmayaviṇas*). See also § 2 for one RV. and two AV. duals. The remaining dual will be included in pt. II.

¹ For the sake of convenience this section is made a repertory of all the terms indicating parts of the body of which the dual is found in either Veda and a statement is given of the number of times the word is used in each grammatical number. References are given to the following sections or to the parts of the study, for the use of the plurals and of such duals as do not fall within the scope of this section.

anūkyā, 'aṅsayor madhyadehasya ca sādhi' (Sāy.), AV. 2—1—0.

anūkyē, AV. XI. 3. 9, (odanāśya).

anūvṛj, 'flank'. AV. 0—1—0.

anūvṛjāu, IX. 4. 12^b, (ṛṣabhāśya).

aṣṭhīvāt, 'knee'. RV. 0—2—0; AV. 0—8—0.

aṣṭhivāntāu, RV. VII. 50. 2^b, (mantrakṛtas); AV. IX. 4. 12^c; 7. 10, (ṛṣabhāśya); X. 2. 2^b; XI. 8. 14^a, (pūruṣasya); X. 9. 21^a, (aghnyāyās):

aṣṭhivādbyām, RV. X. 163. 4^a=AV. II. 33. 5^a, (yakṣmīnaś); AV. XI. 3. 45^a, (odanādatas), 45^d, (tvāṣṭur).

āṇḍā, 'testis'. AV. 0—1—0.

āṇḍāu, IX. 7. 13, (ṛṣabhāśya).

āṇḍī, 'testis.' AV. 0—1—0.

āṇḍyāu, VI. 138. 2^d, (pūruṣasya).

īrmā, 'fore-quarter.' AV. 0—1—0.

īrmābhyām, X. 10. 21^a, (vaçāyās).

uchlakhá, 'sole.' AV. 0—1—0.

uchlakhāu, X. 2. 1^d, (pūruṣasya).

upāstha, 'lap.' RV. 61—2—0; AV. 15—0—0.

See § 7 and pt. IV.

ūrú, 'thigh'. RV. 1—6—0; AV. 1—13—0.

ūrú, RV. X. 85. 37^c=AV. XIV. 2. 38^c, (vadhūyós); RV. X. 90. 11^d=AV. XIX. 6. 5^d; RV. X. 90. 12^c, (pūruṣasya); X. 162. 4^a, (striyās); AV. VIII. 6. 3^b, (kanyāyās); IX. 7. 9, (ṛṣabhāśya); IX. 8. 7^a, (āmayaviṇas); X. 2. 3^c; XI. 8. 14^a, (pūruṣasya); X. 9. 21^a, (aghnyāyās); XI. 3. 44^b, (odanādatas): *ūrúbhyām*, RV. X. 163. 4^a=AV. II. 33. 5^a, (yakṣmīnaś); AV. XI. 3. 44^a, (odanādatas): *ūrvós*, RV. VIII. 70. 10^c, (indrasya dāsāśya vā); AV. XIX. 60. 2^a, (mantrakṛtas). See § 2 (AV.) for the remaining dual.

onī, 'breast'. RV. 0—1—0. Cf. pt. III.

onýòs, IX. 101. 14^b, (mātúr).

óṣṭha, 'lip'. RV. 0—1(pt. II.)—0; AV. 1—1—0.

óṣṭhāu, AV. X. 9. 14^a, (aghnyāyās).

kaphāuḍā, 'elbow'. AV. 0—1—0.

kaphāuḍāu, X. 2. 4^c, (pūruṣasya).

karāśna, 'fore-arm'. RV. 1—2—0.

karāsnā, III. 18. 5^d, (agnés); VI. 19. 3^a, (indrasya).

kárṇa, 'ear'. RV. 5—8—3 (§§ 4—6); AV. 2—11—0.

kārṇā, RV. IV. 23. 8^d, (āyós); IV. 29. 3^a; VI. 38. 2^a, (indrasya); VI. 9. 6^a, (mantrakṛtas); VIII. 72. 12^c, (gharmāsyā); AV. X. 2. 6^b, (puruṣasya); X. 9. 13^b, (aghnyāyās); XII. 4. 6^a, (vaçáyās); XII. 5. 22, (brahmagavyās); XVI. 2. 4, *bis*, (mantrakṛtas): kārṇābhyām, RV. X. 163. 1^b = AV. II. 33. 1^b, (yakṣmīnas); AV. IX. 4. 17^c, (rṣabhāsyā); IX. 8. 2^a, (āmayaviṇas): kārṇayos, AV. VI. 141. 2^b, (vatsāsyā); XIX. 60. 1^b, (mantrakṛtas). See part II for the other two duals (RV.).

kārṇaka, 'outspread leg'. AV. 0—1—0.

kārṇakāu, XX. 133. 3^a, (kumāryās).

kaçaplakā, 'buttock.' RV. 0—1—0.

kaçaplakāu, VIII. 33. 19^c, (āsaṅgāsyā).

kuṣṣī, 'flank, loin.' RV. 4—5—1 (§ 6); AV. 3—5—0.

kuṣṣī, RV. II. 11. 11^c; X. 28. 2^d; 86. 14^d; AV. II. 5. 4^b, (indrasya); AV. IV. 16. 3^c, (váruṇasya); IX. 5. 20^d, (ajāsyā); X. 9. 17^b, (aghnyāyās): kuṣṣībhyām, AV. II. 33. 4^c, (yakṣmīnas): kuṣṣyós, RV. III. 51. 12^a; VIII. 17. 5^a, (indrasya).

kulphá, 'ankle.' RV. 0—1—0. Cf. gulphá.

kulphāu, VII. 50. 2^b, (mantrakṛtas).

kroḍá, 'breast.' AV. 2—1—0.

kroḍāu, X. 9. 25^a, (aghnyāyās).

gábhasti, 'hand.' RV. 6—23—0.

gábhastī, VI. 19. 3^a; VII. 37. 3^c, (indrasya): gábhastyós, I. 82. 6^b; 130. 4^a; III. 60. 5^b; V. 86. 3^c; VI. 29. 2^c; 45. 18^a; VIII. 12. 7^b; X. 96. 3^b, (indrasya); IX. 76. 2^a, (sómasya). See § 3 for the other twelve duals.

gavínikā, 'groin.' AV. 0—2—0.

gavínike, I. 11. 5^b, (náryās); IX. 8. 7^b, (āmayaviṇas).

gavīnī, 'groin.' AV. 0—5—0.

gavīnyós, I. 3. 6^a, (āmayaviṇas), V. 25. 10^b—13^b, (náryās).

gulphá, 'ankle.' AV. 0—2—0. Cf. kulphá.

gulphāu, X. 2. 1^b, 2^a, (puruṣasya).

cákṣan, 'eye.' AV. 0—1—0.

cákṣaṇī, X. 2. 6^b, (puruṣasya).

cákṣus, 'eye.' RV. 36—0—1 (§ 4); AV. 78—1—3 (§§ 4, 6).

cákṣuṣī, AV. IX. 5. 21^a, (ajāsyā).

jaghāna, 'buttock, haunch.' RV. 1—1—1 (§ 4); AV. 1—0—0.

The one dual belongs to part II.

jānghā, 'leg.' RV. 2—0—0; AV. 0—2—3 (§ 6).

- jāṅghe, AV. X. 2. 2^c, (puruṣasya): jāṅghayos, XIX. 60. 2^a, (mantrakṛtas).
- jānu, 'knee.' RV. 1—0—0; AV. 1—3—0.
- jānubhyām, IX. 8. 21^a, (āmayaviṇas); X. 2. 3^b, (puruṣasya): jānunos, X. 2. 2^d, (puruṣasya).
- dānṣṭra, 'tusk, molar, fang.' RV. 0—1—1 (§ 6); AV. 0—4—1 (§ 6).
- dānṣṭrā, RV. X. 87. 3^a = dānṣṭrāu, AV. VIII. 3. 3^a, (agnés): dānṣṭrābhyām, AV. X. 5. 43^a, (vāiçvānarāsyā): dānṣṭrayos, IV. 36. 2^c; XVI. 7. 3, (vāiçvānarāsyā).
- dānta, 'deciduous middle incisor'. AV. 0—4—0.
- dāntāu, VI. 140. 1^c, 2^d, 3^b, 3^d, (çiços).
- doṣān, 'fore-leg.' AV. 0—2—0.
- doṣāṇi, IX. 7. 7, (rṣabhāsyā); X. 9. 19^a, (aghnyāyās).
- nās, 'nose, nostril.' RV. 0—1—0; AV. 2—1—0.
- nasós, RV. V. 61. 2^c, (āçvasya); AV. XIX. 60. 1^b, (mantrakṛtas).
- nāsū, 'nose, nostril.' RV. 0—1(pt. II.)—0; AV. 0—1—0.
- nāse, AV. V. 23. 3^b, (kumārāsyā).
- nāsikā, 'nose, nostril.' RV. 0—1—0; AV. 1—4—0.
- nāsike, AV. X. 2. 6^b, (puruṣasya); X. 9. 14^a, (aghnyāyās); XV. 18. 4, (vrātyasya): nāsikābhyām, RV. X. 163. 1^a = AV. II. 33. 1^a, (yakṣmīnas).
- nādī, 'retovahe' (Sāy.), 'seminal ducts.' AV. 0—1—0.
- nādyāu, VI. 138. 4^a, (puruṣasya).
- nṛbāhū, 'arm of man.' RV. 0—1—0.
- nṛbāhūbhyām, IX. 72. 5^a, (sotúr).
- pakṣá, 'wing.' RV. 3—5—2 (§ 4); AV. 1—6—1 (§ 6).
- pakṣá, RV. I. 163. 1^c; VIII. 34. 9^b, (çyenāsyā); X. 106. 3^a, (çakunāsyā): pakṣāu, AV. IV. 34. 1^c, (odanāsyā); VI. 8. 2^b, (suparnāsyā); VIII. 9. 14^b, (yajñāsyā); X. 8. 18^a; XIII. 3. 14^a, (haṁsāsyā); X. 9. 25^c, (aghnyāyās). See § 3 for the other two RV. duals.
- paṭāurá, 'side, costal region.' AV. 0—1—0. See § 3 for the only dual.
- pativédana, 'husband-finder, breast?' AV. 0—1—0.
- pativédanāu, VIII. 6. 1^b, (kanyāyās).
- pád, 'foot.' RV. 16—10—8 (§§ 4—6); AV. 11—13—7 (§ 6).
- páda, RV. I. 24. 8^c, (súryasya); VI. 29. 3^a; X. 73. 3^a, (indrasya); X. 90. 11^d = pádāu, AV. XIX. 6. 5^d; pádāu, RV. VI. 47. 15^c, (puruṣasya); AV. I. 27. 4^a, (mantra-

kṛtas); VI. 9. 1^a, (vadhūyós); X. 1. 21^a, (kṛtyás); XI. 8. 14^a, (pūruṣasya); XIX. 49. 10^a, (stenásya): padbhyām, RV. X. 90. 12^d, 14^c = AV. XIX. 6. 6^d, 8^c, (pūruṣasya); AV. V. 30. 13^d, (āmayaviṇas); XII. 1. 28^c, (mantrakṛtas): padós, RV. X. 166. 2^c, (sapatnaghnás); AV. I. 18. 2^a, (striyás); XII. 4. 5^a, (viklindvas). See also § 6 and pt. II.

pānī, 'hand.' RV. 0—2—1 (§ 6); AV. 1—1—0.

pānī, RV. IV. 21. 9^a, (indrasya); VI. 71. 1^c, (savitúr): pānibhyām, AV. II. 33. 6^c, (yakṣmīnas).

pāda, 'foot.' RV. 2—0—2 (§ 6); AV. 1—5—1 (§ 6).

pādabhyām, AV. IX. 8. 21^a, (āmayaviṇas); XI. 3. 46^a, (odanādatas): pādayos, XIX. 60. 2^b, (mantrakṛtas). See also §§ 2 and 3.

pādakā, 'little foot.' RV. 0—1—0.

pādakāu, VIII. 33. 19^b, (āsaṅgásya).

pārçvā, 'side.' RV. 1—0—0; AV. 2—5—0.

pārçvé, IX. 4. 12^a, (ṛṣabhásya); IX. 5. 20^d, (ajásya); IX. 8. 15^a, (āmayaviṇas); XI. 8. 14^c, (pūruṣasya): pārçvābhyām, II. 33. 3^b, (yakṣmīnas).

pārṣṇī, 'heel.' RV. 1—1—0; AV. 2—3—1 (§ 4).

pārṣṇī, AV. X. 2. 1^a, (pūruṣasya): pārṣṇibhyām, II. 33. 5^b = RV. X. 163. 4^b, (yakṣmīnas): pārṣṇyos, VI. 24. 2^b, (ādyuttasya).

prāpad, 'forepart of foot.' AV. 0—1—0.

prāpados, VI. 24. 2^b, (ādyuttasya).

prāpada, 'front part of foot.' RV. 0—1—1 (§ 6); AV. 1—3—1 (§ 4).

prāpadābhyām, RV. X. 163. 4^b = AV. II. 33. 5^b, (yakṣmīnas); AV. X. 3. 47^a, (odanādatas); XI. 3. 47^d, (savitúr).

barjahyā, 'nipple.' AV. 0—1—0.

barjahyē, XI. 8. 14^c, (pūruṣasya).

bāháva, 'arm.' RV. 0—3—0.

bāhāvā, II. 38. 2^b, (savitúr). See § 2 for the other two duals.

bāhú, 'arm, fore-leg.' RV. 2—50—10 (§§ 4—6); AV. 2—19—7 (§ 4).

bāhú, RV. I. 95. 7^a; X. 142. 5^c, (agnés); I. 102. 6^a; III. 51. 12^c; VI. 47. 8^c = AV. XIX. 15. 4^c; VIII. 61. 18^c; 77. 11^c, (indrasya); I. 163. 1^c, (hariṇásya); I. 190. 3^b; IV. 53. 3^c. 4^c; VI. 71. 1^b, 5^a; VII. 45. 2^a; 79. 2^d, (savitúr); V. 43. 4^a, (somasútranas); X. 90. 11^c, 12^b = AV. XIX.

6. 5^a, 6^b, (púruṣasya); X. 102. 4^d, (vr̥ṣabhásya); X. 121. 4^c; AV. IV. 2. 5^c, (hiranyagarbhásya); AV. VI. 65. 1^b, (çátros), VI. 99. 2^c, 3^a; XIX. 13. 1^a, (índrasya); VII. 70. 4^a 5^a, (prtanyatás); IX. 4. 8^a, (várunasya); IX. 7. 7, (r̥ṣabhásya); X. 2. 5^a, (púruṣasya); X. 9. 19^a, (aghnyáyās): bāhúbhyām, RV. II. 17. 6^a; IV. 22. 2^b, (índrasya), VII. 22. 1^c, (sotúr); X. 81. 3^c, (viçvákarmaṇas) = AV. XIII. 2. 26^c, (súryasya); X. 163. 2^d = AV. II. 33. 2^d, (yakṣmīṇas): bāhvós, RV. I. 51. 7^c; 52. 8^c; 63. 2^b; 80. 8^c; II. 11. 4^b, 6^c; 20. 8^c; 36. 5^b; III. 44. 4^d; IV. 22. 3^c; VI. 23. 1^d; 46. 14^d; VII. 25. 1^c; VIII. 96. 3^b, 5^a; X. 52. 5^c; 153. 4^b, (índrasya); V. 16. 2^b, (agnés); VII. 84. 1^c, (yájamānasya); AV. VII. 56. 6^a, (çarkóṭasya); XIX. 60. 1^d, (mantrakṛtas). For the other duals, six RV. and one AV. see §§ 2 and 3.

bhurij, 'hand, arm.' RV. 0—4—0; AV. 0—1—0.

bhurijos, RV. IX. 26. 4^a, (sotúr). The other four duals belong to part III.

bhedá, 'pudenda.' RV. 0—1—0.

bhedáu, IX. 112. 4^c, (náryās).

bhrú, 'brow.' RV. 0—1—0.

bhruvós, IV. 38. 7^d, (dadhikráyās).

mátasna, 'lung.' RV. 0—1—0; AV. 0—2—0.

mátasne, AV. X. 9. 16^a, (aghnyáyās): mátasnābhyām, II. 33. 3^c = RV. X. 163. 3^c, (yakṣmīṇas).

mušká, 'testis, pudendum.' RV. 0—1—0; AV. 0—7—0.

muškáu, AV. IV. 37. 7^c, (gandharvásya); VI. 127. 2^b, (āmayaviṇas); XX. 136. 1^c, 2^b, (náryās mahānagnyās): muškābhyām, VIII. 6. 5^c, (kanyáyās): muškáyos, RV. X. 38. 5^d, (índrasya); AV. VI. 138. 4^d, 5^d, (náryās).

? *rají*, 'pudendum?' RV. 0—1—0.

rají, X. 105. 2^c, (pátnyās). So GRV. and BRV. GWB. and LRV. take it as some kind of a maned animal. PWB. merely cites Sāyaṇa's two guesses—*rajasī dyāvāprthivāv iva* or *mahantāu rañjakāu sūryācandramasāv iva*.

vārtman, 'eyelid.' AV. 0—1—0.

vārtmabhyām, XX. 133. 6^c, (kumāryās).

vr̥kká, 'kidney.' RV. 1—0—0; AV. 0—2—0.

vr̥kkáu, VII. 96. 1^d, (púruṣasya); IX. 7. 13, (r̥ṣabhásya).

çīprā, 'lip.' RV. 0—6—2 (§ 4).

- cīpre, I. 101. 10^b; III. 32. 1^c; V. 36. 2^a; VIII. 76. 10^b; X. 96. 9^b, (īndrasya): cīprābhyām, X. 105. 5^c, (īndrasya).
çīrṣakapālā, 'cranial hemisphere.' AV. 0—1—0.
 çīrṣakapālē, XV. 18. 4, (vrātyasya).
çrīṅga, 'horn.' RV. 2—6—5 (§§ 4, 6); AV. 2—8—1 (§ 4).
 çrīṅge, RV. V. 2. 9^d = AV. VIII. 3. 24^d; RV. VIII. 60. 13^b, (agnés); IX. 5. 2^b; 70. 7^b; 87. 7^c, (sómasya); AV. II. 32. 6^a, (krímes); VIII. 3. 25^a, (agnés); IX. 7. 1, (ṛṣabhásya); X. 9. 14^b, (aghnyáyās); XX. 130. 13, (prídākavas, cf. 129. 9, 10): çrīṅgābhyām, IX. 4. 17^a, (ṛṣabhásya); XIX. 36. 2^a, (mañés). See part II. for the other RV. dual.
çrónī, 'hip.' RV. 0—1—0; AV. 0—6—0.
 çrónī, AV. IX. 4. 13^b; 7. 9, (ṛṣabhásya); X. 2. 3^c, (púruṣasya); X. 9. 21^b, (aghnyáyās): çrónibhyām, RV. X. 163. 4^c; AV. II. 33. 5^c, (yakṣmīṇas); AV. IX. 8. 21^b, (āmayavīṇas).
çrótra, 'ear.' RV. 2—0—0; AV. 19—4—0.
 çrótre, AV. XI. 3. 2^a, (odanásya); XIV. 1. 11^c, (sūryáyās, cf. RV. X. 85. 11^c—çrótram): çrótrābhyām, XI. 3. 33^{ad}, (odanādatas).
sákthī, 'leg.' RV. 1—0—0; AV. 1—1—0.
 sákthibhyām, X. 10. 21^b, (vaçáyās).
sakthí, 'leg.' RV. 0—2—0; AV. 0—3—0.
 sakthyā, RV. X. 86. 16^b, 17^d = sakthyāu AV. XX. 126. 16^b, 17^d, (īndrasya); sakthyāu, AV. VI. 9. 1^b, (vadhūyós).
saṅdhī (*jānunos*), 'knee-joint.' AV. 1—1—0.
 saṅdhī, X. 2. 2^d, (púruṣasya).
stāna, 'nipple, teat.' RV. 3—1(pt. II.)—0; AV. 1—3—5 (§ 6).
 stānau, AV. IX. 1. 7^b, (madhukaçáyās); X. 2. 4^c, (púruṣasya).
 See § 6 for the other dual.
hānu, 'jaw.' RV. 1—5—1 (§ 6); AV. 1—6—0.
 hānū, RV. IV. 18. 9^b; V. 36. 2^a, (īndrasya); X. 79. 1^c, (agnés); X. 152. 3^b = AV. I. 21. 3^b, (vrtrásya); AV. VI. 56. 3^b, (svajásya); X. 9. 13^b, (aghnyáyās); XIX. 47. 9^a, (vríkasya); hānvos, RV. I. 52. 6^d, (vrtrásya); AV. X. 2. 7^a. 8^c, (púruṣasya).
hāsta, 'hand.' RV. 29—17—5 (§§ 4, 6); AV. 22—18—4 (§ 4).
 hāstā, RV. IV. 21. 9^a; VIII. 68. 3^c, (īndrasya); hāstau, RV.

X. 117. 9^a; AV. XI. 8. 14^b, 15^a, (pūruṣasya); AV. VI. 81. 1^a, (nāryās); VII. 26. 8^c, (viṣṇos); VII. 109. 3^c, (kitavāsya); VIII. 1. 8^d, (āmayaviṇas); XIX. 49. 10^b, (stenāsya): hāstābhyām, AV. III. 11. 8^c, (satyāsya); VI. 102. 3^c, (bhāgasya); XI. 3. 48^a, (odanādatas); XI. 3. 48^d, (ṛtāsya); XIX. 51. 2, (pūṣṇās): hāstayos, RV. I. 24. 4^c, (savitūr); I. 38. 1^b, (pitūr); I. 55. 8^a; 81. 4^e; 176. 3^a; VI. 31. 1^b; 45. 8^a, (īndrasya); I. 135. 9^c, (vāyós); I. 162. 9^c, (çamitūr); IX. 18. 4^b; 90. 1^d, (sómasya); AV. I. 18. 2^b, (striyās): XVIII. 3. 12^c, (mantrakṛtas). For the other duals see § 3 (1 RV., 4 AV.) and pt. II. (2 RV.).

In this section are listed 146 of the 191 duals of the natural bodily parts, found in the RV., and 212 of the 225 such duals in the AV.

Of the RV. instances, 96 pertain to the various gods. Indra leads with 65. Savitar follows with 10 and Agni is close behind with 9. Only 39 pertain to human beings, and of these 11 pertain to the *yakṣmīn* (consumptive) of X. 163, a hymn distinctively Atharvanic and at home in AV. II. 33. Seven pertain to animals, 3 to demons and 1 to the inanimate *gharmā*.

The different sphere of the AV. is well shown in its contrasts to these numbers. Humanity comes to the front with 124 duals and the sick still lead with 30. The animals get 49 duals and the gods drop to the third place with only 24 duals in all. Indra still leads them, but with a paltry 7. Agni is a close second with his 6 and Savitar has but a single dual. The demons have 5; inanimate objects 9, of which 4 pertain to the *odanā*.

Thus these duals clearly establish the hieratic character of the RV. and the demotic character of the AV. The importance of this distinction will appear later.

Only in 4 instances out of these 358 duals is there the slightest need to comment upon any grammatical usage. In three instances the dual is predicate to a singular—AV. IX. 7. 9—*bālam ūrī* (strength his thighs) and *id.* 13—*kródho vṛkkāu manyūr aṇḍāu* (anger his kidneys, wrath his testes). In RV. X. 85. 11^c—*çrótram te cakré āstām* (thy chariot wheels were an ear) shows the reverse, a singular predicate to a dual. The AV. XIV. 1. 11^c has this pāda with the normal *çrótre*.

§ 2.

A duality of bodily parts, naturally dual, associated with a duality of persons.

The RV. has five instances of this phenomenon:—*akṣī* (*açvīnos*), I. 120. 6^c,—*ākṣī çubhas patī dān*, (Hither your eyes, ye lords of splendor); *bāhāvā* (*mitrāvāruṇayos*), V. 64. 2^a,—*tā bāhāvā sucetūnā prā yantam asmā ārcate*, (Stretch forth with kindly thought those arms unto this one that sings); VII. 62. 5^a,—*prā bāhāvā sisṛtaṁ jīvāse na*, (Stretch forth your arms to grant us life); *bāhūbhyām* (*mitrāvāruṇayos*), VIII. 101. 4^a,—*bāhūbhyām na uruṣyatam*, (Keep us in safety by your arms); *bāhvōs* (*mitrāvāruṇayos*), V. 64. 1^c,—*pāri vrajēva bāhvōr jagan-vānsā svārṇaram*, (As in the pen-fold of your arms encompassed ye the realm of light).

The AV. also has five instances:—*ānsāu* (*açvīnos*), IX. 4. 8^b—*īndrasyātūjo vāruṇasya bāhū açvīnor ānsāu marūtām iyām kakūt*, (Indra's strength, Varuna's arms, the Aṣvins' shoulders, this Marut's hump); *akṣyāu* (*vadhūyōr vadhūaṣ ca*), VII. 36. 1^a,—*akṣyāu nāu mādhusanikāṣe, ānikam nau samāñjanam*, (Of honey aspect be our eyes, an ointment be our face); *ūrūbhyām* (*mitrāvāruṇayos*), XI. 3. 44^a,—*tātaṣ cāinam anyābhyām ūrūbhyām prāçīr yābhyām cāitām pūrva īsayah prāçnan | ūrū te mariṣyata ity enam āha | tām vā / mitrāvāruṇayor ūrūbhyām tābhyām enam prāçīsam tābhyām enam ajīgamam* (If thou didst eat this with other thighs than those with which the Rishis of yore did eat it, thy thighs will die', thus says one to him. — — — 'With the thighs of Mitra-Varuṇa, with these I ate this', etc.); *pādābhyām* (*açvīnos*), XI. 3. 46^a,—*tātaṣ cāinam anyābhyām pādābhyām °/—°/—°/ açvīnoḥ pādābhyām °/ °/* ('If with other feet', etc.— — — 'With the feet of the Aṣvins, etc.); *bāhūbhyām* (*açvīnos*), XIX. 51. 2^b,—*açvīnor bāhūbhyām pūṣṇō hāstābhyām prāsūta ā rabhe* (With the Aṣvins' arms, with Pushan's hands, I, impelled, seize thee).

It will be noticed that nine of these ten passages refer either to the Aṣvins or to Mitra-Varuṇa. Though it is true that of all the Vedic pantheon the deities of these respective groups are the ones most intimately associated, that Mitra is so closely assimilated to Varuṇa that, as Macdonell (Ved. Myth., p. 27) observes, he has hardly an independent trait left, that only on the rarest occasions are the Aṣvins separable,

yet there is never a unification of the members of either dual. Nowhere are they invoked in the singular; nowhere described by a singular epithet; nowhere is a singular verb predicated of them. The immediate context in at least seven of our passages would positively forbid such an hypothesis as an explanation of the dual.

Nor are they *metri causa*, as the plural will scan in each of the eight metrical passages. That they are mere grammatical *lapsus linguae* or due to laxity of thought on the part of the Rishis, should be our *dernier ressort*. We hold that this interpretation is unworthy and unnecessary and that a study of the passages, both by themselves and in contrast with those of § 5, in which a plurality of these same bodily parts is associated with these same dual divinities, reveals a conscious purpose in the selection of the grammatical number. In the passages before us this purpose is the dissociation and individualization of the members of the duality. Such an assumption is made imperative by AV. VII. 36. 1, where the eyes and singular face must individualize the bride and the groom. Each *nāu* receives its full interpretation only in "of each of us."

In AV. IX. 4. 8, the phrase *marūtām iyān kakūt* requires the individualization of the Maruts, for they can possess no collective *kakūt*. The natural extension of this distributive idea to the former part of the pāda gives the clearest and best explanation of the dual, *açvīnor ānsāu*.

If we compare the five RV. passages, each having the idea of duality so strongly explicit in it, with those of § 5, we can hardly decide otherwise than that in the passages with the dual, the Rishis address the deities with an implied 'each of you', and in those passages that have the plural, with an implied 'both of you'.

We have thus a logically consistent and satisfying explanation of the eight such duals found in the metrical portions of the Vedas. In each of the two passages from the *Odana Sūkta* (AV. XI. 3), the same explanation may apply, if not so obvious and compelling, or the duals may in each instance be echoic of the perfectly normal duals of the same words immediately preceding.

§ 3.

A duality of bodily parts, naturally dual, associated with a plurality of persons.

We find twenty instances in the RV.:—(1), *ánsayos* (*marútām*), V. 57. 6^a,—*rṣṭáyo vo maruto ánsayor ádhi sáha ójo bāhvór vo bálaṁ hitám | nṛmṇā ṣṛśásv áyudhā rátheṣu vo víḥvā vaḥ ṣṛir ádhi tanúṣu pipiḥ* || (Lances are on your shoulders twain, O Maruts; energy and strength are placed together in your arms; manliness on your heads, weapons on your cars, all majesty is moulded on your forms); (2), *gábhastyos* (*marútām*), I. 64. 10^c,—*ástāra iṣum dadhire gábhastyoḥ* (The archers have set the bow in their hands); (3), I. 88. 6^d,—*iśá syá vo maruto 'nubhartrí prāti śtobhati vāgháto ná vāṇi | ástobhayad vṛthāsām ánu svadhām gábhastyoḥ* ||¹ (This invigorating hymn, O Maruts, peals forth in praise to meet you, as the music of one in prayer. Joyously did Gotama make these sing forth a gift of praise unto your hands); (4), V. 54. 11^c,—*áñseṣu va rṣṭáyah patsú khādáyo vákṣassu rukmā maruto ráthe gúbhaḥ agnibhrājaso vidyúto gábhastyoḥ ṣiprāḥ ṣṛśásu vítatā hiraṇyáyih* || (Lances on shoulders, spangles on feet, gold on your breasts, splendor on your car, fire-glowing lightnings in your hands, visors wrought of gold arranged upon your heads); (5), *gábhastyos* (*somasútvānām*), IX. 10. 2^b,—*hinvánāso ráthā iva dadhanviré gábhastyoḥ | bhārāsaḥ karīṇām iva* || (Driven on like chariots the Somas flow in the hands, like hymns of the singers); (6), IX. 13. 7^c,—*dadhanviré gábhastyoḥ* (they flow in the hands); (7) and (8), IX. 20. 6^b; 65. 6^b,—*mṛjámāno*

¹ The passage is difficult and has no satisfactory explanation in commentator or translator. The principal mooted points are the substantive implied in *a*, the subject and object of *ástobhayad* in *c*, the syntax and reference of *āsām* in *c* and of *gabhastyos* in *d*. Stanzas 4 and 5 are replete with the idea of the excellence and potency of Gotama's former hymns. Here he expresses his confidence of continuing merit and the consequent acceptance and approval of the present effort, the *anubhartrī* of *a*. *Astobhayad* has the Gotama of 4 and 5 for its subject, and its object is implied in *āsām*, the antecedent of which is *ṣṣā anubhartrī* of *a*. The case of *āsām* is the partitive gen. after the idea of 'give, present' implied in *astobhayad* (cf. Speijer's Sk. Syn. § 119 and E. Siecke, *De gen. in ling. Sansk. imp. Ved. usu* § 7, p. 36). *Gabhastyor* depends upon same idea of 'present' in the verb, and refers to the Maruts. This gives at least a consistent sense and a possible syntax.

gábhastyoḥ (cleansed in the hands); (9) and (10), *IX. 36. 4^b* and *64. 5^b*,—*ṣumbhāmāna ṛtāyúbhīr mṛjāmāno gábhastyoḥ* (made radiant by pious men, cleansed in their hands); (11), *IX. 71. 3^a*,—*ádribhiḥ sutáḥ pavate gábhastyoḥ* (Soma pressed by the stones becomes clear in the hands); (12), *IX. 107. 13^d*,—*tám im hinvanty apáso yáthā ráthaṁ nadīṣv á gábhastyoḥ* (Skilful men drive him as a car, in streams in their hands); (13), *IX. 110. 5^c*,—*ṣáryābhīr ná bhāramāno gábhastyoḥ* (Borne on by the arrows, as it were, of the hands); (14), *pakṣá (vīnám), VIII. 47. 2^c*,—*pakṣá váyo yáthopári vy ásmé ṣárma yachata* and (15), *VIII. 47. 3^b*,—*vy ásmé ádhi ṣárma tát pakṣá váyo ná yantana* (Spread your protection over us as birds spread their wings); (16), *bāhúbhyām (āṅgirasām), II. 24. 7^c*,—*té bāhúbhyām dhamitām agnim áçmani* (They leave upon the rock the fire enkindled with their arms); (17), *bāhúbhyām (āyūnām), X. 7. 5^c*,—*bāhúbhyām agnim āyávo 'jananta* (With their arms did men generate Agni); (18), *bāhvós (marútām),* see no. 1 above; (19), *bāhvós (mṛṇām), VI. 59. 7^b*,—*indrāgnī á hí tanvaté nāro dhānvāni bāhvóḥ* (Indra-Agni, men are stretching the bows in their arms); (20), *hástābhyām (mantrakṛtām), X. 137. 7^a*,—*hástābhyām dáçaçākḥābhyām* (With our hands of ten branches we stroke thee).

The AV. furnishes these six instances:—(1), *paṭāurāú (strī-nām), XI. 9. 14^b*,—*pratighnānāḥ sám dhāvāntu úraḥ paṭāurāv āghnānāḥ* (Let them run together, without anointing, smiting each her breast and thighs); (2), *pádābhyām (devānām), X. 7. 39^a*,—*yāsmāi hástābhyām pádābhyām vācā çrótrena cákṣuṣā* [Unto whom (Skambha), with hands, with feet, with voice, with hearing and with sight (the gods continually render tribute)]; (3) and (4), *hástābhyām (mantrakṛtām), IV. 13. 7^a* and *c*,—*hástābhyām dáçaçākḥābhyām . . . anāmayitnúbhyām hástābhyām tábhyām tvābhī mṛçamasi ||* (With our hands of ten branches, . . . with hands that banish disease, with these we stroke thee); (5), *VI. 118. 1^a*,—*yád dhástābhyām cakrmá kilbiṣāṇi akṣāṇām gaṇām upalípsamānāḥ* (If we have committed sins with our hands, in our desire of the troop of the dice); (6), *X. 7. 39^a*, see no. 2 above.

An examination of these passages in detail will readily show in twenty-two of them the same clearly marked individuality of action among the plurality of actors that we found in the preceding section in the case of the duality of actors.

In fifteen of the twenty instances in the RV., it will be seen at once that the specified act naturally and imperatively demands the exercise of both of the given bodily members for its performance. Such are the acts in nos. 2 and 19, aiming the bow; in nos. 16 and 17, kindling fire with the fire-sticks; in nos. 14 and 15, birds spreading their wings; in nos. 5 to 13 inclusive, the pressers cleansing the soma. In all the AV. passages we have evidence of the individual element in the action. In no. 1, the sg. *úras* and dual *paṭāurāu* serve this purpose; in nos. 2 and 6 the singulars of *b* as well as the duals of *a* indicate the individual rather than the collective homage of the gods; in no. 5 the gamblers seek forgiveness each for his own sins, not for their joint offences; in nos. 3 and 4 and in RV. no. 20, it is the shaman that acts. It may be that in AV. nos. 3, 4 and 5 and RV. no. 20, we have a single subject speaking in the first plural and that these really belong in § 1 rather than here.

It remains to show that the same explanation holds in the other four passages. We should remember that the Rishis have all the Oriental exuberance and liveliness of fancy, love of variety and of profuse ornamentation. They excel also in the use of the swift, bold and sometimes startling transition. They were often consummate artists, masters of word-painting. They exhibit their skill now throughout an entire hymn, now in a stanza that is a miniature master-piece, now in a single word that is a thrill with poetic concept. The difficulty is for the cool, logical and too often phlegmatic Occidental mind to appreciate the riotous luxuriance of their imagination and the art that is in its expression.

In our no. 4 of the RV. the swift transition from the plurals of *a* and *b* to the duals of *b* and *c* and then back to the plurals of *d* is but a part of the Rishi's artistic equipment, of his professional stock in trade, by which he presents to view now the group, now the individual member of it and now again the group. To us, unfamiliar with the real nature of the *vidyut*, it may seem to accord ill with the imagery of the context and even to make the picturesque almost grotesque, to represent the individual Maruts as clutching with both hands their missile bolts, but surely there is nothing incongruous in this to the Hindoo familiar with that magnificent but appalling electrical display by which the whole arch of

heaven, from zenith to horizon, is made to glow with such continuous flashes of flame that the intense inky blackness of the monsoon night is made to rival the brilliance of the tropical noonday.

In nos. 1 and 18 of the RV., which are from successive *pādas* of the same *ṛc* and separated only by our alphabetic scheme of listing, the transition from the plurals of *a* and *b* to the duals of *c* and *d* may be compared in effect to a painting in which individual Maruts are strongly limned in the foreground and the Marut host sketched in more vague and shadowy outlines in the background. Too fanciful? There are scores of such artistic transitions in the RV. Again as the lances are the *vidyut* flashes the Rishi is not without skill in his art when he makes them in their play rest upon both shoulders of the individual Maruts. In no. 3 of the RV. a like interpretation presents an individualistic touch at the close of the *ṛc* that has opened with a collective plural address. Gotama's gift of song is unto you, O Maruts, yea unto you individually as well as collectively.

So in every instance cited the use of the dual resolves the plurality of persons and presents the component individuals. The art of the hieratic Rishi is pronounced in at least four of the passages and the demotic shaman of the AV. shows no parallel. The results accord with those of § 2 and are the proper contrast to those derived from the study of the next section.

§ 4.

A plurality of bodily parts, naturally dual, associated with a plurality of persons.

We find these thirty-five instances in the RV.:—(1), *āñseṣu* (*marūtām*), I. 64. 4^c,—*āñseṣv eṣāṁ nī mīmṛkṣur ṛṣṭāyaḥ* (The lances on their shoulders beat down); (2), I. 166. 9^c,—*āñseṣv ā vaḥ prāpathesu khādāyo* (Spangles on your shoulders in your journeys); (3), I. 166. 10^c,—*āñseṣv étāḥ pavīṣu kṣurā ādhi* (On shoulders, buckskins; on fellies, knives); (4), I. 168. 3^c,—*āñsām āñseṣu rambhīṇīva rārabhe* (On their shoulders rests, as it were, a lance); (5), V. 54. 11^a,—*āñseṣu va ṛṣṭāyaḥ patsú khādāyo* (Lances on your shoulders, spangles on the feet); (6). VII. 56. 13^a,—*āñseṣv ā marutaḥ khādāyo vo* (On your shoulders, O

Maruts, are spangles); (7) *akṣāṇi*, (*pūruṣāṇām*), VII, 55. 6^c,—*yā āste yāc ca carati yāc ca pācyati no jānaḥ | tésām sám hanmo akṣāṇi* (Of him who sits and him who walks and him who looks on us, of these we close the eyes); (8), *akṣābhis* (*yājāmānānām*), I. 89. 8^b,—*bhadrām paçyemākṣābhir yajatrāḥ* (May we with our eyes behold the good, ye adorable ones); (9) and (10), I. 139. 2^{fg},—*dhībiç canā mānasā svēbhir akṣābhiḥ sómasya svēbhir akṣābhiḥ* (Not with the thoughts, the mind, but with our own eyes, our own eyes of Soma given, have we behold the golden one); (11), IX. 102. 8^a,—*krátvā çukrēbhir akṣābhir ṛṇór āpa vrajān divāḥ* (With our eyes clear with wisdom unbar the stall of heaven); (12), *apikakṣēbhis* (*devānām*), X. 134. 7^c,—*pakṣēbhir apikakṣēbhir ātrābhi sám rabhāmahe* (To your wings, to your shoulders, there do we closely cling); (13), *kārṇebhis* (*yājāmānānām*), I. 89. 8^a,—*bhadrām kārṇebhiḥ çṛṇuyāma devā* (May we, O Gods, with our ears hear the good); (14), *cākṣūṇṣi* (*pūruṣāṇām*), V. 1. 4^b,—*cākṣūṇṣīva sūrye sám caranti* (As the eyes of men turn to Sūrya); (15), *jaghānān* (*āçvānām*), VI. 75. 13^b,—*ā jañghanti sánv eṣām jaghānāñ ūpa jighnate* (He lashes their backs, lashes their haunches); (16), *pakṣān* (*vinām*), I. 166. 10^d,—*vāyo ná pakṣān vy ānu çriyo dhire* (As birds their wings, the Maruts spread their glory out); (17), *pakṣēbhis* (*devānām*), same as no. 12 above; (18), *paḍbhis* (*yājāmānānām*), IV. 2. 14^b,—*paḍbhir hāstebhiç cakrmā tanúbhiḥ* (We have done with our feet, our hands, our bodies); (19), X. 79. 2^c,—*ātrāṇy asmāi paḍbhiḥ sám bharanty uttānā-hastā nāmasādhi vikṣú* (With their feet they gather food for Agni, with upraised hands and reverence in their dwellings); (20), *patsú* (*marūtām*), see no. 5 above; (21), *bāhavas* (*nṛṇām*), X. 103. 13^c,—*ugrá vaḥ santu bāhavo* (Strong be your arms, O heroes, in battle); (22), *bāhūn* (*yātudhānām*), X. 87. 4^a,—*praticó bāhūn prāti bhandhy eṣām* (Break their arms raised against you); (23), *bāhúbhis* (*marūtām*), I. 85. 6^b,—*prā jigāta bāhúbhiḥ* (Advance with your arms); (24), (*agnimānthanānām*), III. 29. 6^a,—*yādī mānthanti bāhúbhir ví rocate* (When they rub Agni with their arms, he shines forth); (25), (*maḥatō mānyamānānām*), VII. 98. 4^b,—*sākṣāma tán bāhúbhiḥ çāçadānān* (We shall subdue them confiding in their arms); (26), *bāhūṣu* (*marūtām*), I. 166. 10^b,—*bhūrūṇi bhadrá nāryeṣu bāhūṣu* (Many goodly things are in your manly arms); (27), VIII. 20. 10^b,—*rukmaśo ādhi bāhūṣu* (Golden ornaments upon their

arms); (28), *çiprās (marútām)*¹, V. 54. 11^a,—*çiprāḥ çirśasu vitatā hiranyáyih* (Visors of gold arranged upon their heads); (29)¹, VIII. 7. 25^b,—*çiprāḥ çirśān hiranyáyih* (Visors of gold upon their heads); (30), *çṛṅgāṇi (çṛṅgīṇām)*, III. 8. 10^a,—*çñū-gāṇivéc çṛṅgīṇāṁ sām dadṛçre caśālavantaḥ svāraṇaḥ pṛthivyām* (The sacrificial posts set in the earth and adorned with knobs, seem like the horns of horned creatures); (31), (*sakthāṇi (marútām)*), X. 61. 3^c,—*vī sakthāṇi náro yamuḥ putrakṛthé ná jānayaḥ* (The heroes spread their thighs apart like women in childbirth); (32), *hāstebhis (yājāmānām)*, see no. 18 above; (33), *hāstāir (manuṣīṇām)*, IX. 79. 4^d,—*āpsú tvā hāstāir duduhur manuṣīṇaḥ* (Sages have with their hands milked the soma into the waters); (34), *hāsteṣu (marútām)*, I. 37. 3^b,—*ihēva çṛṇva eṣām kácā hāsteṣu yád vādān* (The whip in their hands is heard as if here, when they crack it); (35), I. 168. 3^d,—*hāsteṣu khādiç ca kṛtiç ca sām dadhe* (A ring and a dagger are held in their hands).

The AV. has fourteen instances of its own:—(1), *cákṣūṇṣi (çátrūṇām)*, III. 1. 6^c,—*cákṣūṇṣy agnir ā dattām* (Let Agni take their eyes); (2), *cákṣuṣām (pūruṣāṇām)*, V. 24. 9^a,—*sūryaç cákṣuṣām ādhipatiḥ* (Sūrya is overlord of eyes); (3), *pārṣṇis (durñāmnīnām)*, VIII. 6. 15^b,—*purāḥ pārṣṇiḥ puró mūkhā* (Whose heels are in front, in front their faces); (4), *prāpadāṇi (durñāmnīnām)*, VIII. 6. 15^a,—*yésām paçcāt prāpadāṇi* (The fore-parts of whose feet are behind); (5), *bāhavas (nṛṇām)*, XI. 9. 1^a,—*yé bāhavo yā īṣavo* (What arms, what arrows!); (6), (*çátrūṇām*), XI. 9. 13^a,—*mūhyantv eṣām bāhavaḥ* (Let their arms fail); (7), (8) and (9), *bāhūn (çátrūṇām)*, III. 19. 2^c, VI. 65. 2^c, XI. 10. 16^c,—*vṛçcāmi çátrūṇām bāhūn* (I hew off the arms of the foemen); (10), *çṛṅgāṇi (durñāmnīnām)*, VIII. 6. 14^b,—*yé pūrve badhvó yanti hāste çṛṅgāṇi bibhrataḥ* (Who go before a bride, bearing horns in the hand); (11), *hāsteṣu (yājāmānām)*, IV. 14. 2^b,—*krāmadhvam agniṇā nākam ūkhyān hāsteṣu bibhrataḥ* (Stride ye with fire to the vault of heaven, bearing potfires in your hands); (12), (13) and (14), (*brahmānām*), VI. 122. 5^b, X. 9. 27^b, XI. 1. 27^b,—*brahmāṇām hāsteṣu prapṛthák sādayāmi* (I place these separately in the hands of the Brahmans).

¹ Sāy. glosses the former by *uṣṇīṣāmāṃyas* (consisting of head-dresses), the latter by *çirastrūṇāṇi* (head protectors). The name is doubtless due to some resemblance to the real *çiprās*. 'lips'.

The AV. has also three repetitions from the RV.: *ākṣāṇi*, IV. 5. 5^c = *akṣāṇi* RV. VII. 55. 6^c; *bāhūvas*, III. 19. 7^b = RV. X. 103. 13^c; *bāhūn*, VIII. 3. 6^d = RV. X. 87. 4^d.

A comparison of these passages with those of § 3 in which the dual is associated with a like plurality of persons, shows that in these the plural is thought of as general and collective. The Rishis here view the concert rather than the individualization of the action. In nos. 18 and 32 of the RV. *tanūbhis* shows there is no idea of individuality. So do *vikṣū* of no. 19, the plural simile *jānayaḥ* of no. 31, and the context of no. 27, which has *tanūṣu* in 12^b, *rātheṣu* in 12^c and *ṛīyas* in 12^d. In no. 7 *tēṣām* is plainly "of all these", not "of each of these". Nos. 8, 9, 10, 13, 14, 21, 22, 25, 32 and 33 are obviously general and collective, not specific and individual. In nos. 1 to 6, 20, 23, 26 to 29, 34 and 35 the Rishis refer to the Marut host, not to individual members of it. A comparison of no. 15 with the no. 14 of § 3 shows that here the simile looks to the *ensemble* of wings. So the comparison in no. 31 is general. In nos. 16, 24 and 31 the use of both the bodily members is indeed necessary in any single case, but comparison with nos. 16 and 17 of § 3 shows that the Rishis by the plural generalize the act that the dual would individualize. So with the remaining passages, nos. 12, 15 and 17 of the RV. and all of the AV., the plural is general and synthetic where the dual would resolve the group into its components.

§ 5.

A plurality of bodily parts, naturally dual, associated with a duality of persons.

There are but three instances of this phenomenon, all in the RV. The passages are:—(1), *kūrṇāis* (*uṇvīnos*), I. 184. 2^d. —*ṛutām me achoktūbhir matinām eṣtā narā nicetārā ca kārṇāḥ* (Hearken, ye heroes, to the invocations of my hymns, ye who are worshipped and are observant with your ears); (2), *paḍbhis* (*mitrāvārunayos*), V. 64. 7^d, —*sutām sōmān nā hastībhir ā paḍbhīr dhāvantaṁ narā bibhratāv arcanānasam* (As to the soma finger-pressed, hither speed with your feet, O heroes, supporting Arcanānas); (3), *bāhūbhis* (*mitrāvārunayos*). VI. 67. 1^d, —*sām yā raçméva yamātur yāmiṣṭhā dvā jānāñ āsa-*

mā bāhūbhiḥ svāiḥ (The peerless twain who by their arms as with a rein, best control the peoples).

Concert of action is clearly indicated in all, but most clearly in the third passage. The invocation of the first and second passages has an implied "both of you." Compare and contrast the passages in § 2.

§ 6.

A plurality¹ of bodily parts, naturally dual, ascribed to an individual.

We expect the plural when a plural numeral is added. There are these instances: RV. *akṣābhis* (*agnés*), I. 128. 3^d,—*çatām cākṣaṇo akṣābhiḥ* (Observant with a hundred eyes); X. 79. 5^c,—*tāsmāi sahāśram akṣābhir vi cakṣé* (He looks on him with a thousand eyes); *pādās* (*ghṛtāsya*), IV. 58. 3^a,—*catvāri çṛṅgā trāyo asyo pādā* (Four are his horns and three his feet); *bāhūn* (*úrurāsyā*), II. 14. 4^b,—*nāva cakhvāṇsaṁ navatīm ca bāhūn* (Showing nine and ninety arms); *bāhūṣu* (*brāmāṇḍasya*), VIII. 101. 13^c,—*citrēva prāty adarçy āyaty āntār daçāsu bāhūṣu* (Radiant Uṣas is seen advancing amid the ten arms); *çṛṅgā* (*ghṛtāsya*), IV. 58. 3^a,—see *pādās* above; *hástāsas* (*ghṛtāsya*), IV. 58. 3^b,—*dvé çīrsé saptā hástāso asya* (Two are his heads and seven his hands).

AV. *padbhis* (*púruṣasya*), XIX. 6. 2^a,—*tribhiḥ padbhir dyām arohat* (With three feet he climbed the sky); *cákṣūṇṣi* (*bha-*

¹ The plural is the natural number in the following instances: RV *padbhis*, IV. 38. 3^c (*ácvasya* *dadhikrás*); *pāṇibhis*, II. 31. 2^d (= *çaphá ácvasya*); *pādās*, I. 163. 9^a (*ácvasya*); *prápadāis*, VI. 75. 7^c (*ácvasya*).

AV. *jāṅghās*, IX. 7. 10 (*ṛṣabhāsya*); X. 9. 23^a (*aghnyāyās*); *jāṅghābhis*, IV. 11. 10^b (*anađúhas*); *pakṣāṇām*, IX. 3. 4^c (= *sthūṇā viçvāvārāyās*); *padās*, IV. 15. 14^d (*maṇđúkasya*); IX. 4. 14^c (*ṛṣabhāsya*); *padbhis*, III. 7. 2^b (*hariṇāsya*); IV. 11. 10^a (*anađúhas*); IV. 14. 9^d (*ajāsya*); *patsú*, VI. 92. 1^d (*ácvasya*); *pādān*, XIV. 1. 60^a (*āsandyās*); *stánās*, IX. 7. 14; X. 9. 22^b; 10. 7^d (*aghnyāyās*); *stánān*, XII. 4. 18^b (*vaçáyās*); *stánebhya*, X. 10. 20^d (*vaçáyās*).

Twice in AV. such a plural is resolved into two duals:

pādāu, XV. 3. 4 (*āsandyās vrātyasya*).

tāsyā grīṣmāç ca vasantāç ca dvāu | pādāv āstām çarāç ca varṣāç ca dvāu. (The summer and the spring were two of its feet, the autumn and the winter were two).

stánān, VIII. 10. 13 (*virājo vaçáyā iva*).

bṛhāç ca rathamtarām ca dvāu stánāv āstām | yajñāyajñīyam ca vāmadevyām ca dvāu. (B. and R. were two of her teats, Y. and V. were two).

vāsya) XI. 2. 5^b,—*yāni cākṣūṃṣi te bhava*¹ (To the eyes that thou hast, be homage, O Bhava). In this latter instance the numeral is expressed in the *sahasrākṣa* of 3^d, 7^b and 17^a.

That these plurals are due to poetic tropes or to mythic or mystic creations of Hindoo fancy admits of no question. No one thinks of a literal interpretation. The hundred or the thousand eyes of Agni are the bright flames that dart forth beams of light in all directions. The metaphor requires the plural. The numeral is intensive. By its use Agni is represented as sharp-sighted or omnivident. The nine and ninety arms of the Asura Uraṇa mean only that the demon is many-armed or strong-armed. The ten arms of *brahmāṇḍa* are, as Sāyaṇa says, the ten *diśas* or regions of the universe.

It is liturgical mysticism that turns the *ghṛta* into a *gāura*, or Indian buffalo, and then proceeds to invest it with the symbolism of such an odd plurality of natural members, four horns, three feet, two heads and seven hands. Speculation as to the interpretation of these symbolic members was rife among the native commentators² and their inability to think the Rishi's thoughts after him is shown in the great variety of conclusions reached. Without undertaking to decide among them we know that the plural members are mystic and symbolic and that the Rishi had no conscious conception of the resultant zoomorphic incongruity of his fancy. The addition of the hands shows that the idea of an actual *gāura* is not present to his consciousness.

In AV. XIX. 6, the shifting mythic symbolism produces an almost continuous change in the anatomy of the cosmic *puruṣa*. In 1 he has a thousand arms, a thousand eyes and a thousand feet; in 2, three feet; in 4, four feet; in 5 and 6, two arms and two feet; in 7, one eye. There are similar changes in the corresponding RV. X. 90, but they do not come so apace.

Of the same nature are the plurals implied in *drigu* compounds. Thus in RV. I. 31. 13^b, Agni is *caturākṣá*; in I. 79. 12^a, *sahasrākṣá*; in V. 43. 13^d, a *tridhātuḥrṇgo vṛṣabhás*; in V. 1. 8^c,

¹ Bhava is identified with Rudra. Cf. VS. 16. 18. 28; 39. 8 and GB, 6. 1. 3. 7. In RV. 2. 1. 6; AV. 7. 87. 1; TS. 5. 4. 3. 1; 5. 5. 7. 4 and GB. 1. 7. 3. 8; 6. 1. 3. 10 this deity is identified with Agni.

² Vid. TA. 10. 10. 2^a; GB. 1. 2. 16; Sāyaṇa on RV. *l. c*; and Mahādhara on VS. 17. 91. The last is especially rich in alternatives.

a *sahásraçrñgo vṛṣabhās*; in VIII. 19. 32^b, a *sahásramuṣko devās*; in I. 97. 6^a, he is *viçvátomukha*; in III. 38. 4^d, *viçvárūpa*; etc., etc. These *dvigu* compounds are figurative allusions to the phenomena of fire, celestial or terrestrial. A similar interpretation explains all such in either Veda.

Closely akin to these plurals with numerals are those in metaphors and poetic symbolism in which the number is obviously determined by the figure. A clear instance is RV. X. 127. 1,—*rātrī vy ākhyad āyatī purutrā devy ākṣábhīs* (The goddess Night, as she approaches, looks about in many a place with her eyes). Her eyes are the stars and the plural is as natural here as is the dual in RV. I. 72. 10^b, in which *akṣī divás* (eyes of the sky) are the sun and moon.

A number of such instances cluster about Agni. In RV. I. 146. 2 he is transformed into an *ukṣá mahán* that *urvyāḥ padó nī dadhāti sánau* (Plants his feet upon the broad earth's back). The tauropœia justifies the plurality of feet. In III. 20. 2, the Rishi says to Agni—*tisráś te jihvá . . . tisrá u te tanvò* (three are thy tongues, . . . three also thy bodies), in which the plurals are due to the symbolism of the metaphors. Sāyana identifies the three tongues as the three sacrificial fires, *gārhapatya*, *āhavanīya* and *dakṣiṇa* and makes the three bodies *pāvaka*, *paramāna* and *çuci*. Other interpretations have been given but none that impugns the figure which justifies the plurals. Our principle becomes clear, if we compare two such passages as V. 2. 9^d—*úçíte çrñge rákṣase viníkṣe* (He whets his horns to gore the Rakṣas) and I. 140. 6^d—*bhūmó ná çrñgā davidhāva durgṛbhīs* (Like one terrific he tosses his horns). In the former the tauropœia is complete and the duality of horns naturally follows; in the latter the simile in which Agni is compared to a bull rampant in the jungle suggests the metaphor by which the tips of flame are called his horns. The flames are uppermost in thought and the plurality of horns inevitably follows. Sāyana well says *çrñgū çrñgavad unnatā jvālās* (flames shooting up like horns) and Yaska (Nir. I. 17) gives *çrñgāṇi* as one of the eleven synonyms of 'flames.' In II. 2. 4^c,—*pṛçnyāḥ patarām citāyantam akṣábhīḥ pāthó ná pāyām jānasī ubhé ánu* (The bird of the firmament, observant with his eyes, as guard of the path looks at both races). The first metaphor avifies the celestial Agni and suggests the second, in the transition to which the first

fades away as the plurality of phenomena comes to the front in thought and leads to the plural eyes in the new metaphor. Sāyana's *svakīyāir jvālārūpāir avayavāḥ* (his own members having the form of flames) expresses the idea.

Similar is RV. X. 21. 7^{cd},—*ghṛtāpratīkam mānuṣo vī vo māde ṣukrām cētiṣṭham akṣābhīr vīvakṣase* (With butter-smeared face you are merry in spirit, bright, observant with your eyes, you wax great). In *a* Agni is an *ṛtvij* (priest); in *c* the personification is fading from thought in the transition to the new figure in *d*. Sāyana's *vyāptāis tejobhis* (far-extending, radiant flames) well explains the metaphor in *akṣābhis* and its plural form. Parallel to this is VIII. 60. 13,—*ṣṛṅāno vṛṣabhō yathā agnīḥ ṣṛṅge dāvidhrat | tigmā asya hānavo na pratidhṛṣe sūjāmbhaḥ sūhaso yahūḥ* (Like a bull Agni doth whet and toss his horns. Sharp are his jaws and not to be withstood, with good teeth, strong and swift). The simile in *a* and *b* shows the proper duality of horns. In *c* comes the new figure and its natural resultant in the plural *hānavo*. So in X. 79 we have a shift from *hānū* in 1^c and *akṣī* in 2^a to *sahāsram akṣābhīr* in 5^c.

The sacrificial aspect of Agni in II. 13. 4^c,—*āsinvan dān-ṣṭrāḥ pitūr atti bhōjanam* (Insatiate with his tusks he eats his father's food) should be contrasted with the zoomorphic Agni of X. 87. 3^{ab},—*ubhōbhayāvinn ūpa dhehi dānṣṭrā hīnśrāḥ ṣṛṅāno 'varam pāram ca* (Apply thy tusks destructive, whetting both, the upper and the lower). The dual of the latter is required by the personification; the plural of the former is as necessary to the metaphor of the consuming flames. In it the personification is arrested and the metaphor predominates. There is no need of disregarding the usual distinction between *dānṣṭra* and *dānta*, as is so often done in the interpretation of the former passage.

One passage relating to Agni remains. This is the much mooted ¹ IV. 2. 12,—*ātas tvām dṛcnyāṇi agna etān paḍbhīḥ paśyer*

¹ For a summary of the earlier discussion of this passage and of the word *paḍbhīḥ*, see M. Bloomfield in A. J. P. XI. 350ff. and in Actes du XIV^e Congrès International des Orientalistes, I., or the Johns Hopkins University Circulars, 1906, no. 10, p. 15ff. In the latter paper Professor Bloomfield concludes:—"Shocking as may seem the paradox, we shall, I think, have to endure it, that Agni is here said to see with his feet; of course, the pun as well as the paradox between *paḍbhīḥ* and *pāśyer*

adbhutāṁ aryā évāṁ. We believe that Sāyaṇa's gloss on *padbhīḥ*—*pādāis svatejcbhīḥ paçya* (He sees with his feet, his own bright flames)—embodies the Rishi's meaning so far as the noun itself is concerned. We do not, however, feel compelled to construe it with *paçyer*. It is not so unusual for words at the beginning of successive *padas* to be syntactically connected that we may not construe *padbhīḥ* with *ātas* or with the implicit idea of motion in *ātas*. The passage would then mean:—Hence (speeding) with thy feet (*i. e.*, thy nimble jets of flame) mayst thou, O Agni, noble one, behold those wondrous ones (*i. e.*, the gods) in visible presence (*i. e.*, go thither carrying our oblations and prayers). In either case the passage swings right into line with all the others considered relative to Agni and the metaphor affords ample explanation of the plural. In the latter case the paradox and supposed difficulties of the passage vanish.

We shall next consider the passage X. 99. 12 that has so long proved a puzzle for the commentators: *evā mañó asura valśúthāya vamrakāḥ padbhīr ūpa sarpad indram | sá iyānāḥ karati svastīm asmā īṣam ūrjani suksītīm víçvam ābhāḥ ||* (Thus, Asura, for his exaltation did the great Vamraka crawl upon his feet up to Indra. That one, when supplicated, will give him a blessing; food, strength, secure dwelling, all will he bring him).

Bloomfield has shown (*ll. cc.*) that *padbhīs* everywhere means primarily "with the feet" and has argued plausibly for an occasional secondary meaning, "quickly, nimbly, briskly, etc." Cf. our colloquial "with both feet." This word may, then, be considered to lie within this range of meaning. *Vamraka*, too, is a mooted word. Its possibilities are, however, either an ant,¹ or a Rishi, or a demon. In a study to be published separately the writer has maintained that *Vamraka* is here Ant, the personified type of his genus. If, then, *vamraka* is ant, the plural *padbhīs* is natural; if Rishi or demon, the plural is

may have invited an unusually daring poet to this *tour de force*. Of itself the likening of the nimble jets of flame to moving feet is not out of the Rishi's range. The exact sense of the passage is not quite clear, but its obscurities are not likely to affect our judgment of *padbhīḥ* either one way or another."

¹ So PWB. and G.W.B. Sāyaṇa, Griffith and Ludwig take it as name of a Rishi; GRV. as that of a demon.

the intensive with Bloomfield's secondary meaning or else due to a paronomasia upon the literal meaning of his name. In any case the difficulty of the plurality of feet is removed.

In I. 163. 11^{cd}, it is said of the horse:—*táva ṣṛṅgāṇi viṣṭhitā purutrá āraṇyeṣu jārbhurānā caranti* (Tossing thy horns outspread in all directions, thou rangest in the wildernesses). With this we must compare 9^a preceding:—*hiraṇyaṣṛṅgō 'yo asya pādā* (Golden-horned is he, of iron are his feet). Sāyaṇa explains the implied *ṣṛṅgāṇi* of 9^a by *unnata ṣiraśko hrdaya-ramaṇa ṣṛṅgasthānīya ṣiroruko* (Prominent hairs of the head made fast at its centre and occupying the usual place of horns) and the expressed *ṣṛṅgāṇi* of 11^c by *ṣiraśo nirgatāḥ ṣṛṅgasthānīyāḥ keṣāḥ* (Hairs growing out from the head in the usual place of horns). Sāyaṇa is thus consistent and we believe him alone of the commentators¹ to be correct. He undoubtedly means the foretop. As *hari* is the predominant color of the Vedic horse, *hiraṇya* is a natural epithet for the foretop. What could better suggest the comparison in 11^{cd} than the waving, tossing hairs of a heavy, shaggy foretop? The metaphor alone is ample reason for the plural horns. We have also the additional reason that in this hymn the horse is a celestial animal actually identified in 3^a with Āditya, the sun, and coursing the heavens in 6 and 7. This identification is more or less prominent throughout the hymn. The foretop, then, represents also the beams of the sun.

In IX. 15. 4^{ab}, the Rishi says of Soma in the press:—*eṣā ṣṛṅgāṇi dódhuvac chiçitē yūthyò vṛṣā* (He brandishes his horns; he whets them as a bull of the herd). Oldenberg's identification of the horns of soma here with the horns of the moon affords no explanation for the plural and seems otherwise in-

¹ LRV. renders 9^a "mit goldenem [vorder] hufe erz die beiden [hinter] füsse" and in 11^c renders *ṣṛṅgāṇi* by "hufen." We believe the *pādā* of 9^a is the *pādās* of the *padapāthi*, not the dual of LRV. GRV. renders 9^a "Goldhufig ist er, Eisen seine Füße" and *ṣṛṅgāṇi* of 11^c by "Hufe". This reduces the poetic figure to a mere comparison of material composing horn and hoof. Wilson renders 9^a "His mane is of gold," etc., and 11^c "The hairs of thy mane," etc. This does not render Sāyaṇa properly. On top of the head "in the usual place of horns," i. e. between the ears, is the foretop, not the mane. Griffith translates literally "horns" in both passages, citing Sāy. in 9^a for "mane" and commenting on 11^c "Meaning, here, perhaps, hoofs." The meaning must, of course, be the same in both passages.

consistent with the entire context. Occidental commentators are silent. Sāyaṇa glosses *ṣṛṅgāṇī* by *ṣṛṅgavad unnatān an-ṣūn abhiṣavakale* (Stalks or filaments of the soma plant that project like horns at the time of the pressing). This suits the case admirably. The figure explains the number and leads on naturally to the simile of *b*.

The omnific Viṣvakarman is the universal father and the architect of the world. In X. 81. 3 the Rishi says:—*viṣvātaṣ-kaṣur utā viṣvātomukho viṣvātobāhur utā viṣvātaspat | sām bāhūbhyān dhāmati sām pātatrāir dyāvābhūmī janāyan devā ékaḥ ||* (With eyes and face on every side, and arms and feet on every side, with twain arms and with wings he kindles the fire, that lone god creating heaven and earth). The implied plurals of the compounds of *a* and *b* are hyperbolic and intensive. Cf. our "He is all eyes, all ears," etc. The dual of *c* is noticeable. Though the god may have multiple arms yet in twirling the fire-sticks naturally but two are used. The plural *pātatrāir* may best be considered as poetic hyperbole again, akin to the implied intensive plurals of *a* and *b*. With two arms Viṣvakarman starts the fire; with many wings he fans into fervent heat the flames that are to fuse heaven and earth for his welding. There is the prosaic alternative that *pātatrāir* may mean "pinions," i. e. "wing-feathers" rather than "wings."

There is a poor imitation of the passage in AV. XIII. 2. 26—*yó viṣvācarṣaṇir utā viṣvātomukho yo viṣvātaspaṇir utā viṣvātasprthah | sām bāhūbhyām bhāratī sām pātatrāir dyāvāprthivī janāyan devā ékaḥ ||* The diversity of bodily members in *c* may mean that the god, Sūrya this time, bears heaven and earth in his two arms and that the poet gives him the hyperbolic plurality of wings to indicate the swiftness and strength of his flight.

In a description of Indra in RV. III. 36. 8 we have: *hradū iva kuṣṣāyaḥ somadhānūḥ sām ī vivyāca sávanā purāṇi* (Like lakes are his flanks, soma-containing; verily he holdeth full many a libation). In the RV. *kuṣṣi* occurs only in connection with Indra. It is found five times in the dual and only here in the plural. This unique plural may be considered as a hyperbole in thorough keeping with 6°, in which the soma-filled Indra is too vast for heaven to contain him.

But one more instance remains. This is the AV. XI. 6. 22°

—*yá devīḥ pāṇca pradiṣo yé devā dvādaṣa rtāvah | sanivatsa-rāsya yé dāuṣṭrās té naḥ santu sūdā çivāḥ* || (The five divine regions, the twelve divine seasons—the fangs of the year, let these ever be propitious to us). The numerals in *a* and *b* and the metaphor sufficiently warrant the plural. There is the alternative of taking *dāuṣṭrās* as the equivalent of *dantās*. So V. Henry, Les Livres X, XI et XII de l'Atharva Veda, has: “En totalisant probablement, soit donc $5 + 12 = 17 \times 2$ (parce que toute entité céleste a son double terrestre et réciproquement) = 34, ce que qui donne une denture à peu près normale”.

Excluding from the count the natural plurals, the plurals with numerals attached and those implied in the *dvigu* epithets, we have left in the RV. a total of thirteen instances in which a plurality of bodily parts, naturally dual, is ascribed to an individual. The AV. contributes one independent instance and one adaptation from the RV. These include in their number nearly all the mooted instances of plural for dual in Vedic.

It was some of these that raised Delbrück's question¹ and led him to remark:—“Es ist merkwürdig, daß vom Soma gesagt wird *çṛṅgāṇi dodhuvāt*², 9. 15. 4, während es von Agni³ 8. 60. 13 heißt *çṛṅge davidhvat*. In derselben Stelle wird von den *hānavas* des Agni gesprochen. Ich möchte dahin auch *padbhīs*⁴, 4. 38. 3, rechnen, bemerke aber, daß Ludwig das Wort durch ‘Schlingen’ übersetzt. Diese und ähnliche Fälle ließen sich wohl so erklären, daß man sagt, der Dual stehe eben nur da, wo die Beidheit hervorgehoben wird, man könne *çṛṅgāṇi* sagen, wenn nur die Mehrheit ausgesprochen werden soll, *çṛṅge* wenn man ‘beide Hörner’ sagen will”.

Our study of the passages shows how utterly unsatisfactory is Delbrück's conclusions. As there was need of caution in entering upon this disputed matter we have considered each instance separately and in detail and we think an ample reason for the plural has been found. The numerical plurals and the *dvigu* compounds furnished the key as their figurative interpretation is beyond question. The next advance was the extension of a like exegetical method to the interpretation of

¹ See p. 1 above.

² See p. 39. Cf. RV. I. 140. 6, p. 36.

³ See p. 37.

⁴ See n. on p. 34. The reference is to the feet of the mythical horse, Dadhikrā.

the passage referring to the eyes of Rātrī. which is indisputably correct; then to the seven passages referring to the plural members of Agni, and then to the remaining five passages of the RV. and the two of the AV. Every instance yields readily to the same solvent. The poetic figure,—metaphor, paronomasia, hyperbole, etc., or a combination of these,—that flits before the Rishi's mind at the moment or the mythic concept of his imagination, fixes the plural. In not a single instance could the dual have been used without a decided poetic loss.

It is in this section alone that any plural of bodily parts could be considered as an encroachment upon the domain of the dual. So far as these fifteen instances out of the entire five hundred and fifteen considered in these pages are concerned, the encroachment, if it may be so termed, is purely artistic and not syntactical.

The disparity of instances between the RV. and the AV. is but another indication of the enormous difference between these two Vedas in poetic power and artistic skill. The study of the "Dual in Comparisons" reveals the same striking difference in the use of figurative language. We have in this section the same principles operating in metaphors that we find there to be operative in similes. The two studies illumine each other and together show that the mooted use of plural for dual in Vedic is simply the difference between the highly figurative and richly poetic language of the hieratic Rishi and the more prosaic diction of the Atharvan Shaman, the difference between the imaginative conceptions of a poet and the mechanical composition of a versifex.

It is but simple justice to the much-contemned Sāyaṇa to note that, whatever may be his lack of merit in some other respects, in several of these passages he alone of all commentators has caught the spirit and meaning of the ancient Rishis. Our method of interpretation was wrought out before reading his commentary. but we are glad it is supported by him.

§ 7.

A duality of bodily parts, naturally singular, associated with a duality of persons.

The RV. has these eight instances:—(1), *upāsthā* (*pitrór uśāsas* = *divásprthivýós*), I. 124. 5^d,—*óbhā pṛnānti pitrór upás-*

thā (Filling both laps of her parents); (2), *tanvā* (*açvīnos*), I. 181. 4^b,—*arepāsā tanvā nānabhiḥ svāiḥ* (Unblemished bodies, with marks their own); (3), VII. 72. 1^d,—*spārhāyā çriyā tanvā çubhānā* (Radiant in body with an enviable beauty); (4), *tanvā* (*ménayos*), II. 39. 2^c,—*méne iva tanvā çumbhamāne* (Like two dames adorning their bodies); (5), *tanvā* (*uṣāsos*), III. 4. 6^b,—*ā bhādamāne uṣāsā ūpāke utā smayete tanvā vīrūpe* (Night and Dawn, closely united, come hither beaming and smile; different in hue are their bodies); (6), *tanvā* (*dīvāsprithivyoṣ*), IV. 56. 6^a,—*punāné tanvā mithāḥ* (Making pure their bodies alternately); (7), *tanvā* (*indrāgnyoṣ*), X. 65. 2^b,—*mithó hinvanā tanvā sāmokasā* (Speeding each the other, having bodies with one dwelling); (8), *çépā* (= ¹ *hārī yājamānasya*), X. 105. 2^b,—*hārī yāsyā suyūjā vīratā vér ārvantānu çépā* (Whose twain dun steeds, well-yoked, swerving apart, thou seekest after, fleet stallions).

There is no clear instance in the AV., as the *tanū* of IV. 25. 5^b, like that of RV. X. 183. 2^b, is better taken as a loc. sg. Some consider *tanvā* in our nos. 2 and 3 to be inst. sg.

These eight duals are obviously normal and need no comment in explanation or justification. They make the list of the duals of the bodily parts entirely complete for the two Vedas.

Our study of the dual of the natural bodily parts has been based only upon the two oldest monuments of the language, the Rig and the Atharva Veda. Among the results we may repeat by way of summary the following.

We have found 191 such duals in RV. and 225 in AV., also 62 plurals in RV. and 37 in AV. referring to the same bodily parts. Of the duals, 158 in RV. and 212 in AV. pertain to individuals and the dual expresses in each instance the natural number of the bodily parts specified. Of these as duals, there is no need of comment, as they are admittedly characteristic of the language at all periods. Their numerical distribution, however, has been found to indicate strongly the

¹ A much mooted passage. Because of the close similarity of *a* to I. 63. 2^a,—*yād dhārī indra vīratā vér*—we prefer Bergaigne's (II. 256) interpretation, and incline to modify it by accepting Sāyana's *çepavantānu* as the sense of *çépā*. Cf. *hastin* as an analogous synecdochical metonym.

marked contrast between the hieratic character of the RV. and the demotic nature of the AV. An attentive scanning of the list will reveal many interesting and not unimportant details which neither our space has permitted nor our special theme has required that we should indicate. These have been thought an ample justification for the publication of the entire list, which is also more complete than Grassmann's and contains several corrections of his.

We have found only eight duals, all in RV., of bodily parts naturally singular, referring to a duality of persons. The number of such "pure" duals seems rather surprisingly small, less than two per centum of the Vedic duals. Their entire absence from the AV. is also striking.

We have found only two instances, both in AV., of a phenomenon natural enough, yet so rare, duals arising from the resolution of natural plurals.

We have found that of the naturally dual parts of the body, both duals and plurals are used in reference to a duality or a plurality of individuals, that the dual resolves the group and presents the acts of the component individuals, that the plural merges the individual into the concert of the group, that of a dualic group the dissociative dual is far more frequent than the synthetic plural (10 to 3), while of a plural group the plural is just twice as frequent as the dual (52 to 26), that the resolution of a plural group is far more numerous (20 to 6) in the RV. than in the AV. and is sometimes attended by distinctively hieratic and artistic characteristics and that its "ambal" nature is very marked.

We have found that 24 plurals in RV. and 20 in AV. refer to individuals, but in 4 instances in RV. and 16 in AV. this plural expresses the natural number of bodily parts and in 7 in RV. and 2 in AV. plural numerals are attached showing the figurative or symbolic nature of the plurals. For the remaining 15 instances we have found a simple logical and consistent explanation, based not upon any preconceived notions but upon ample evidence furnished by the Vedas themselves. Contrary to the impression of eminent scholars we find that Vedic Sanskrit does not admit plurals for duals with any marked freedom and that the supposed encroachment of plural upon dual is purely an artistic phenomenon in

every instance and one characteristic of the higher reaches of hieratic art.

Incidentally we have given a new or a modified interpretation to several passages, the more important of which have been briefly noted.

Finally, and by way of anticipation also, we may add that the conclusions drawn from the remaining parts of our study give ample confirmation to our main conclusions from the foregoing.

The Kashmirian Atharva Veda, Book Two.—Edited, with critical notes, by LEROY CARR BARRET, M.A., Ph.D., Dartmouth College, Hanover, N.H.

Prefatory.—The second book of the Kashmirian AV. is here presented, elaborated upon about the same methods and principles as was the first book, published in volume 26 of this Journal. As in the first book so here the transliteration is regarded as of first importance: the publication of Bloomfield's *Vedic Concordance* makes it unnecessary to report variants in full as was done for the first book, but if a hymn or a stanza appears in the *Concordance* then at least one reference is given, so that practically all the new material is immediately evident.

It will be noted that sometimes the transliteration of an entire hymn is given followed by an emended version, while again transliteration and emendation proceed stanza by stanza: no strong objection will be made to this freedom, if it is remembered that the work is still in an experimental stage. But it may be objected that while the word "experimental" is used here in the preface, further on the emendations are proposed with an air of considerable certainty: for I am sure it has not been possible to indicate successfully just the shade of certainty I feel concerning the proposed readings. Let us discuss the situation. Here is a manuscript, the sole and only one of its kind, written in such a slovenly fashion and so corrupt that in many places the true reading can never be attained: some of the hymns it presents are known in other texts, the rest are not known in any other text. In editing a hymn which appears both here and elsewhere one is constantly tempted to think that the Paipp. reading is only a corruption of the reading given by the other text, because one gets to feel that any and all mistakes are liable to appear in this manuscript. The easy thing then is simply to set down the reading of the other text as the correct reading of

the Pāipp., but just because it is easy it creates a tendency that needs to be restrained. When we take up new hymns there is always a temptation to indulge freely in conjectural emendation, which is indeed a pretty pastime, but not productive of firmly founded results: when a pāda or a stanza seems senseless (a conclusion which may sometimes be reached too readily) it would not be difficult, at least in some cases, to write one sensible and suitable to the context. But this is not criticism. Emendations are suggested here which are pure conjecture and not to be regarded in any other light; surely here if anywhere conjectural emendation has its opportunity but here as everywhere its value is very slight. Such are the principles I have tried to follow in editing this text: this statement of them may be taken too as a protest against certain methods of textual criticism, the methods of those who so gaily chop or stretch texts to make them fit a preconceived theory.

The transliteration is given in lines which correspond to the lines of the ms.; the division of words is of course mine, based upon the edited text. The abbreviations need little explanation: Ç. is used to refer to the AV. of the Çāunikiya School, and ms. (*sic*) is used for manuscript to avoid confusion with the other abbreviation MS. The signs of punctuation used in the ms. are pretty faithfully represented by the vertical bar (= colon) and the "z" (= period): in transliteration the Roman period stands for a *virāma*. The method of using daggers to indicate a corrupt reading is that familiar in the editions of classical texts.

Introduction.

Of the ms.—This second book in the Kashmir ms. begins f. 29b, l. 6 and ends at the bottom of f. 48b,—19½ folios; of these f. 43 is badly broken and from f. 42a the larger part of the written surface has peeled off: other than this there is practically no damage to the ms. in this part. There are as many as 20 lines to the page and as few as 15, but the most of the pages have 17 to 19 lines.

Numbering of hymns and stanzas.—In this book there are no stanza numbers and furthermore the end of a stanza is not regularly indicated by a mark of punctuation; often a visarga or virāma is the only indication of the end of a hemistich. Most frequently the colon is the mark used if any

mark appears. Except when rewriting a stanza corrections of punctuation have not been mentioned regularly.

The hymns are grouped in anuvākas, all properly numbered save the tenth. The anuvākas consist of five hymns each save that the sixth has six. Practically all the hymns are numbered,—only three times is the number omitted and only five times is the wrong number written. At the end of No. 49 stands a sort of colophon, imañ rakṣāmantram digdhandhanam (*sic*); after some formulae which are thrust into the middle of No. 50 stands iti agnisūktam; and after No. 69 stands iti ṣaḍṛtasūktam (*sic*).

Accents.—The accentuation in this book is about as poorly done as the punctuation. Accents are marked more or less fully on 30 stanzas of 12 different hymns, not counting a very few cases where an accent stands lonesomely on one single word: in no hymn is the accentuation marked on all the stanzas. No marks appear after f. 36b. I have marked the accents in transliterating, but have not attempted to edit them in the emended portions because they seem to have no value.

Extent of the book.—This book contains 18 anuvākas each having 5 hymns, except that anu 6 has 6, so that I have numbered 91 hymns: but hymns 1 and 2 of anu 17 seem to be in reality only one. The lacunae in f. 42 and f. 43 have not concealed the fact that anu 12 and anu 13 had 5 hymns each,—provided of course that the numbers written are correct, as they seem to be. The mutilation of the two folios has taken away No. 63 entire and parts of Nos. 60, 61, 64, and 65.

The word “hymn” means kāṇḍa whether verse or prose, and there are at least 20 hymns that are non-metrical. The 90 hymns as they now stand in the ms. present approximately 470 stanzas, thus showing an average of 5 stanzas which is clearly the norm here as well as in Ç. 2 for 65 hymns here certainly have 5 stanzas each; only 4 have more than 6 stanzas.

1 hymn has	3 stanzas	= 3 stanzas
3 hymns have	4 “ each	= 12 “
65 “ “	5 “ “	= 325 “
10 “ “	6 “ “	= 60 “
1 “ “	7 “ “	= 7 “
1 “ “	8 “ “	= 8 “
2 “ “	11 “ “	= 22 “
83 hymns		437 stanzas

83 hymns have	437 stanzas
2 hymns possibly have 6 stanzas each =	12 stanzas
5 hymns (uncertain) show about	17 "
1 is entirely lost	
91 hymns	466 stanzas.

Counting in the 5 formulae which appear in the middle of No. 50 we have the approximate total of 470 stanzas.¹

In Book One we saw that 67 out of 112 hymns clearly had 4 stanzas so that it seems that the verse-norm for Books One and Two is the same in Ç. and Pāipp.

New and old material.—In Book One about 150 stanzas out of 425 were new material: here in Book Two about 270 out of the 470 are new. There are 50 hymns which may properly be called new though a number of them contain pādas or even stanzas which are in the *Concordance*. The greater part of the new material is in the second half of the book; 17 of the first 46 hymns are new and 33 of second 44 are new. Perhaps it is also worth while to note here that of the 36 hymns in Ç. 2 18 appear in Pāipp. 2 in fairly close agreement just as 19 of the 35 in Ç. 1 appear in Pāipp. 1.

This book contains hymns and stanzas which appear in Books 1—7 and 19 of Ç.;—1 hymn of Ç. 1; 18 of Ç. 2; 3 of Ç. 3; 2 of Ç. 4; 8 of Ç. 5; 4 of Ç. 6; 2 of Ç. 19; and some scattered pādas of Ç. 7. Of the RV. there are 2 hymns and some stanzas, of MS. 2 hymns and some stanzas, of TB., Vāit., and Kāuç. 1 hymn each.

‘ATHARVA-VEDA PĀIPPALĀDA-ÇĀKHĀ.

BOOK TWO.

1. [f. 29 b l. 6.]

Ç. 4. 7. 2—6.

om̐ nama sti:

lotamāyāi z z om̐ rasam̐ prācyam̐ viṣam̐ arasam̐ yad
udīcyam̐ yatheda:

¹ It will be understood that the figures given are not minutely exact, —could not be and need not be: the total, 470 stanzas is a minimum. The ms. shows about 900 stanzas for Books 1 and 2; from this we may roughly estimate 5500 stanzas for the entire manuscript.

s adharācyam karambheṇa vi kalpate karambham kṛtvā
 turīyam pivassāka:
 m udāhṛtam kṣudhā kṛtvā juṣṭano jakṣivīpyasya nu rūrupaḥ
 vi te madam:
 sarayati çantam iva pātayāmasi | pari tvā varmive çantam
 varcasā:
 sthāpayāmasi | pari grāmyavācitam pari tvā sthāpayāmasi |
 tva:
 ṣṭā vṛkṣāiva sthāsam abhiṣāte na rūrupaḥ pavastvam yas
 tvā pariy akrī:
 nam duruṣebhir ajanīr uta | prakrīr asi tvam oṣadhī atiṣāta
 na rū:

namaḥ z 1 z

The invocation may be read om̐ namo 'sti lotamāyāi. The stanzas may be read thus: arasam prācyam viṣam arasam yad udīcyam | athedam adharācyam karambheṇa vi kalpate z 1 z karambham kṛtvā turīyam pivaspākam udāhṛtam | kṣudhā kila tvā duṣṭano †jakṣivīpyasya na rūrupaḥ z 2 z vi te madam sārāyati çarum iva pātayāmasi | pari tvā varmeva çantvam vacasā sthāpayāmasi z 3 z pari grāmam ivācitam pari tvā sthāpayāmasi | tiṣṭhā vṛkṣa iva sthāman abhriṣāte na rūrupaḥ z 4 z pavastvam tvā pary akrīṇan dūrçebhir ajināir uta | prakrīr asi tvam oṣadhe 'bhriṣāte na rūrupaḥ z 5 z 1 z

2. [f. 29b l. 14.]

āvidyad dyāvāpṛthivī āvidya bhagam açvinā |
 āvidya vrahmaṇaspatiṁ kṛṇomy asam viṣam

Read āvedya in a, b, and c; arasam in d.

vaso hedada viṣam yad ena:
 d aham āçitham utāir adadyāt praruṣo bhavādi jagadaṣ punaḥ
 Pāda d may be read bhavāmi °, but for the rest I see nothing.

mā bibhe:
 r nā mariṣyasī pári tvā māsi viçvātaḥ rasam viṣasya nāvidam
 udhna:

[f. 30a.] ṣ phena madann iva z

Read pāmi in b, ūdhnaṣ phenam in d. Pāda a = Ç. 5. 30. 8a;
 c = SMB. 2. 6. 18c.

apāvocaḍ apavaktā prathamō dāivya bhiṣak. sam aga:
 cchasindragā yavayāva co viṣadūṣaṇiḥ

In VS. 16. 5 and elsewhere is a variant of ab; a possible reading for cd is sam u gacchāsindrajā yavayāvā ca viṣa-dūṣaṇaḥ: read dāivyo in b.

yaç ca piṣṭam yaç cāpiṣṭam :
yady agrham yaç ca dehyam devās sarvasya vidvam so
rasam kṛṇutā viṣam ! :

z 2 z

Read: yac ca piṣṭam yac cāpiṣṭam yac ca grhyam yac
cādehyam | devasya sarvasya vidvān so rasam kṛṇutām viṣam
z 5 z 2 z

3. [f. 30a l. 4.]

Ç. 2. 10.

kṣettriya tvā nirṛtyā jahāsiçamśa druho mūñcasi :
varuṇasya pāçāt. | anāgasam vrāhmaṇā tvā kṛṇomi çiva te :
dyāvāprthivīha bhūtām çan te agnis saha dhībhir astu mam
gāvas sa :

hoṣadhībhiḥ çam antarikṣam saha vātām astu te çam te
bhavantu pradī :

çaç cātasaḥ yā devīḥ pradīçaç cātaso vātapatīr abhi
sūryo vi :

çaṣṭe | tās v edam jarasa ā dadami pra kṣyam eta nirṛtiḥ
parācaḥ :

sūryam ṛtam camaso grāhyā yathā devā muñcantu asṛjan
pare :

tasah évā tvām kṣettriyaṁ nirṛtyā jahāsiçamśa druho mūñcā :
mi varuṇasya pāçā ahómóci yā kṣmā duritā vadadyād druhaḥ :
pātrād grāhyāç cod amóci juhārivartim avidat syūnām apy
abhūta :

bhadre sukṛtasya loke z 3 z

This hymn appears also in TB. 2. 5. 6. 1—2, and all but the fifth stanza in HG. 2. 3. 10; 4. 1: it will be noted that our version is more like these than the Ç. version. For Ppp. version read:

kṣettriya tvā nirṛtyā jāmiçamśa druho muñcāmi varuṇasya
pāçāt | anāgasam vrāhmaṇā tvā kṛṇomi çive te dyāvāprthivīha
bhūtām z 1 z çam te agnis saha dhībhir astu çam gāvas
sahāṣadhībhiḥ | çam antarikṣam saha vātām astu te çam te
bhavantu pradīçaç cātasaḥ z 2 z yā devīḥ pradīçaç cātaso
vātapatīr abhi sūryo vicaṣṭe | tās v etam jarasa ā dadhāmi

pra yakṣma etu nirṛtiṣ parācāliḥ z 3 z sūryam ṛtaṁ tamaso
grāhyā yathā devā muñcanto asrjan paretāsaḥ | evā tvāṁ
kṣetiriyān nirṛtyā jāmiṇaśāsād druho muñcāmi varuṇasya pācāt
z 4 z amoci yakṣmād duritād avadyād druhaḥ pātrād grāhyaç
cod amoci | ahā avartim avidat syonam apy abhūd bhadre
sukṛtasya loke z 5 z 3 z'

4. [f. 30a l. 14.]

Ç. 2. 14.

nissālām dhiṣṇyām dhiṣaṇam ekāvā :

dyām jighatsvam sarvaç caṇḍama napatiyo nāçayāmas
sadātvā | yā :

devāgha kṣettriyād yadi vā puruṣeṣitā | yad astu daçvibhyo
jātā :

naçyatetas sadātvā pari dhāmāny āsām āsrar gāṣṭhām
ivāsaram || :

[f. 30b.] ajīṣo sarvān ājin yo naçyatetaḥ sadātvā nira vo
goṣṭhād ajāmasi :

nir yonin nṛpānaça | nir vo magumdyā duhitaro gr̥hebhyaç
cātayāmasi | :

amuṣminn adhare gr̥he sarvāsvant arāyaḥ | tatra pāpmā ni
yacchatu sa :

rvaç ca yātudhānyaḥ z 4 z

Read: nissālām dhiṣṇyām dhiṣaṇam ekāvadyām jighatsvam |
sarvaç caṇḍasya napyo nāçayāmas sadānvāḥ z 1 z yā devā
aghāṣ kṣetiriyā yadi vā puruṣeṣitāḥ | yadi stha dasyubhyo jāta
naçyatetas sadānvāḥ z 2 z pari dhāmāny āsām āçuḥ kāṣṭhām
ivāsaram | ajīṣaṁ sarvān ājin vo naçyatetas sadānvāḥ z 3 z
nir vo goṣṭhād ajāmasi nir yoner nir upānasāt | nir vo magun-
dyā duhitaro gr̥hebhyaç cātayāmasi z 4 z amuṣminn adhare
gr̥he sarvāṣ santv arāyyaḥ | tatra pāpmā ni yacchatu sarvaç
ca yātudhānyaḥ z 5 z 4 z

Our ms. offers no help towards solving the troublesome
st. 1a.

5. [f. 30b, l. 4.]

Ç. 2. 12.

dyāvāpṛthivī urv āntárikṣam kṣé :

ttrasya pattrír gāyo dbhūtaḥ utāntarikṣam úrvātagopam
teṣu tápyantām ma :

yí tasyamāne z

For b read *kṣetrasya patny urugāyo 'dbhutaḥ*; in cd read *uru vātagopam̐ te 'nu ° ° tapyamāne*.

yadam indra ṣṇuhi somapa ya tvā hṛdā ṣocatā :
johavīmi | vṛcāsi tam̐ kuliceneva vṛkṣam̐ yo smākam̐ mana i :
dam̐ hinasti |

In a read *idam* and *ṣṇuhi*, in b *yat tvā*, in c *vṛcāmi*, and in d *'smākam̐*.

idam̐ devāḥ ṣṇute yajñiyā sta bharadvājo ma :
hyam uktyāni ṣaṁsatu | pāḥ sa baddho durite bhy ucyatām̐
yo smākam̐ :

mana idam̐ hinasti

In a read *ṣṇuta ye yajñiyā stha*, in b *ukthāni*, in c *'bhi yujyatām̐*, and in d *yo 'smākam̐*.

açitibhis tisṛbhis sāmagebhir ādityé :
bhir vāsubhir āṅgīrobhiḥ | iṣṭāpūrtām̐ āvatu naḥ pitṛṇām̐
āmum̐ :

dade harāsā dāivyēna

In c read *iṣṭāpūrtam* and *pitṛṇām̐*.

dyāvāpṛthivī anú mā dīdhyatām̐ :
viçvé devāso anu mǎ rabhadvam̐ | āṅgirasas pitāras
somyāsah | :

pāpas āricchatv apakāmasya kartā z

In a read *dīdhyāthām̐*, in d *pāpam̐ ārcchatv*.

atīva yo maruto manyate no :
vrahma vā yo nīmdviṣataḥ kriyamāṇam̐ tapūṁṣi tasmāi
vrajanāni santu vra :

hmadviṣām̐ abhi tam̐ ṣoca dyāuḥ

In b read *nindīṣat kriyamāṇam̐*, in c *vṛjināni*.

ā dadāmi te padam̐ samiddhe jātavedasi | :
agni ṣarīram̐ veveṣtu imam̐ gacchatu te vasu |

In a read *dadhāmi*, in c *agniḥ* and *veveṣtu*.

sapta prāṇān aṣṭāu majña :
[f. 31 a.] s tāñs te vṛcāsi vrahmaṇā yamasya gaccha mā-
danam̐ agnito araṇkṛtaḥ z z :

z 5 z prathamānuvākaḥ z z

Read: *sapta prāṇān aṣṭāu majñas tāñs te vṛcāmi vrahmaṇā | yamasya gaccha sūdanam̐ agnidūto araṇkṛtaḥ z 8 z 5 z prathamānuvākaḥ z*

6. [f. 31 a. l. 2.]

Ç. 2. 1.

venās tát paçyantá páramam padam yátra :
viçvam bhávaty ékanadām | idam dhenur aduhaj jāyamānās
svarvido bhyanukti :

r virāt.

The simplest emendation in a would be venās, but to let venas stand and read paçyat as in Ç. is possible. In b read ekanādam. Reading idam dhenur aduhaj jāyamānā we have the same pāda as RV. 10. 61. 19d. I am inclined to think that the reading of d in our ms. is only a corruption of Ç. abhy anūṣata vrāḥ.

prthag voced amṛtam na vidvān gandharvo dhāma paramam
guhā yat. || :

trīṇi padāni hatā guhās* vās tāni véda sá pitúṣ pitāsāt.

In a read pra tad and nu, in c nihitā guhāṣya, and in d yas.

sa no :

bāndhur janitā sá vidhartā dhāmani véda bhúvanāni viçvā
yātra devā :

amṛtām ānaçānā samāne dhāmann addhīrayanta |

In b read dhāmāni, in c amṛtam ānaçānās, and in d dhāmany adhy āirayanta. In the margin the ms. gives "to ba."

pari viçvā bhúvanā :

ny āyam upāçaṣṭe | prathámajā ṛtasyā vācas ivāktri bhuva-
neṣṭhā dhā :

sramn eṣa natv eṣo agniḥ

In b read upātiṣṭhe, in c vācam iva vaktari, and for d dhāsyur eṣa nanv eṣo agniḥ.

pari dyāvāprthi sadyāyam ṛtasya ta :

ntum vitatam dr̥keçam | devo devatvam abhirakṣamāṇas
samānam bandhum :

vi pariçchad ekaḥ z 1 z

Read: pari dyāvāprthivi sadya āyam ṛtasya tantum vitatam
dr̥ce kam | devo devatvam abhirakṣamāṇas samānam bandhum
vi pary āicchad ekaḥ z 5 z 1 z

7. [f. 31a, l. 11.]

Ç. 2. 5 (in part).

indra juṣasva yāhi çūra pivā su :
 taçça madhoç cakāna cārun madathaḥ | ā tvā viçantu mutāsa
 indra :
 pr̥ṇasya kuksī viḍhy açatrū dhehy ā naḥ indra jaṭharam
 pr̥ṇasva madho :
 rasya sutasya || upa tvā madeṣu vājo stu | indras turāṣād
 jaghāna :
 vṛtram sāsahā çatrūr mamuç ca | vajrīr made somasyāç*
 ti hava me :
 kiro juṣasya indra syagubhin matsa madāya mahe raṇāya
 z 2 z :

Read: indra juṣasvā yāhi çūra pibā sutasya madhoç ca |
 cakānaç cārur madāya z 1 z ā tvā viçantu sutāsa indra
 pr̥ṇasva kuksī | viḍḍhy açatro dhiyehy ā naḥ z 2 z indra
 jaṭharam pr̥ṇasva madhurasasya sutasya | upa tvā madās suvāco
 'sthuḥ z 3 z indras turāṣād jaghāna vṛtram sasahe çatrūn
 †mamuç ca | vajrīr made somasya z 4 z çrudhī havām me giro
 juṣasvendra svayugbhir matsva | madāya mahe raṇāya z 5 z 2 z

8. [f. 31b, l. 1.]

Ç. 4. 3.

ud itye kramam trayo vyāghraḥ puruṣo vṛkaḥ hṛg veda
 sūryo hṛg devo :
 vanaspatir hṛṇ maṇavantu çattravaḥ paramena pathā vṛka
 pare :
 na stenor arṣatu | tato vyāghraḥ paramā akṣāu ca te hanū
 ca te vyāghram :
 jambhayāmasi | āt sarvān vṛṇṣatin nakhām yat samnaso
 vi yan na :
 so na samnasa | pūrṇā mṛgasya dantā upaçīrṇā u pariṣṭayaḥ
 vyāghram :
 datutām vayan prathamam jambhayāmasi | ād iku stenam
 ahyam yātu :
 dhānam atho vṛkam. | nāivaraspaśāin na gṛhaḥ paraç cara
 dvipāc catu :
 ṣpānto mā hinsīr indrajās somajāsīḥ z om indrajas somajā :
 asiḥ z 3 z

Read: ud ito ye 'kraman trayo vyāghraḥ puruṣo vṛkaḥ | hṛg devas sūryo hṛg vanaspatir hṛñ me namantu çatravaḥ z 1 z paramena pathā vṛkaḥ pareṇa steno arṣatu | tato vyāghraḥ paramena z 2 z akṣyāu ca te hanū ca te vyāghra jambhayāmasi | āt sarvān viñçatīn nakhān z 3 z yat saṁnamo na vi namo vi yan namo na saṁnamah | mūrṇā mṛgasya dantā upaçīrṇā u prṣṭayaḥ z 4 z vyāghraṁ datvatām vayanṁ prathamam jambhayāmasi | ād ittha stenam ahim yātudhānam atho vṛkam z 5 z †nāivaraspaśān na grhaṣ paraç cara dvipāc catuṣpānto† mā hiṁsīr indrajās somajā asi z 6 z 3 z

In st. 1 hiruk, as in Ç., might just as will be written. If st. 2 and 3 were combined we would have a hymn of five stanzas, the norm of Bk. 2. In st. 6 we get good meaning by writing dvipāc catuṣpān no mā ° °; the meter is correct without no: paraç cara is a good ending for pāda b, but the rest seems hopeless.

9. [f. 31 b, l. 9]

Ç. 1. 34. 1 (partly).

yaṁ vīru madhujātā madhune tvā panāmasi ||
madhor adhi prajāto si sā no madhumadhas kṛdhiḥ jihvā-
yāgre me :
madhu jihvāmūle madhulakam | yathā mām kāmīny aso
yaṁ vā :
vā mām anv ā yasī pari tvā paritannuteyakṣanākām avi :
dviṣe | yathā na vidvāvahi na vibhavāva kadā cana rājñi :
vrūhi varuṇāyāçvāya puruṣāya ca | pathā me pathye revati :
jāyām ā vaha sādhunā | jāyām me mitrāvaruṇā jāyām :
devī sarasvatī | jāyām me açvināubhā dhattām puṣkarasṛja :
z 4 z

Read: iyaṁ virun madhujātā madhune tvā khanāmasi | madhor adhi prajātāsi sā no madhumataṣ kṛdhi z 1 z jihvāyā agre me madhu jihvāmūle madhulakam | yathā mām kāmīny aso yaṁ vā mām anv āyāsi z 2 z pari tvā paritatnuneḥṣunāgām avidviṣe | yathā na vidviṣāvahe na vibhavāva kadā canā z 3 z rājñe vrūhi varuṇāyāçvāya puruṣāya ca | pathā me patye revati jāyām ā vaha sādhunā z 4 z jāyām me mitrāvaruṇā jāyām me devī sarasvatī | jāyām me açvināv ubhā dhattām puṣkarasṛjā z 5 z 4 z

For st. 5 cf. below, 35. 5.

10. [f. 32 a, l. 1.]

Ç. 2. 9.

daçavṛkṣa sañcemam ahiñsro grāhyāç ca | atho yenañ
vanaspate :

jīvānām lokam un annayā |

Read muñcemam in a, enañ in c, and lokam unnaya in d.

yaç cakāra mu niṣkarat sa eva suviṣa :
ktamā sa eva tubhyañ bheṣajañ cakāra bhiṣajāti ca |

Read sa (for mu) in a, subhiṣaktamaḥ in b, and bheṣajāni
in d (or possibly with Ç. bhiṣajā çuciḥ): but bhiṣajāti ca
might stand.

cātañ te devāvi :
dañ vrāhmāṇam ud vīvr̥dha cātañ te bhy ottamām avidañ
bhūmyām adhi |

Read devā avidan in a, vrahmāṇa uta vīrudhaḥ for b; 'bhy
uttamam avidan in cd.

āgā :
d ud agād ayañ jīvānām vrātañ apy agāt. abhūta putrā-
ñāñ pitā :

nṛṇāñ ca bhagavattamā

Read abhūd u in c, and bhagavattamaḥ in d.

adhītañ adhy agād ayañ adhi jīvapurāgāt. :
çatañ te sya vīrudhas sahasrañ uta bheṣajaḥ z 5 z anu-
vākañ z z :

Read: adhītim adhy agād ayañ adhi jīvapurā agāt | çatañ
te 'sya vīrudhas sahasrañ uta bheṣajā z 5 z 5 z anuvākaḥ 2 z

11. [f. 32 a, l. 8.]

Ç. 2. 4.

dīrghāyutvātha vīhate rāṇāya ṛṣyāmbho ṛkṣamāñās sadāiva |
ma :

ñis sahasravīryaṣ pari ṇaṣ patu viçvataḥ

Read in a 'yutvāya, in ab rāṇāyāriṣyanto rakṣamāñās;
pātu in d.

idāñ viṣkandhañ sāte :
ayañ rakṣopa bād̥hate | ayañ no viçvabheṣajo jañgiṇaṣ
pātv aña :

saḥ |

Read sahate in a; rakṣān apa seems best in b. Our ms. here spells the name of this amulet with a nasal instead of jaṅgiḍa as in Ç.; I am retaining it as possible peculiarity of the Ppp.

devāir dattena maṇinā jaṅginena mayobhuvah viṣkandham
sarvā :

rakṣānsi vyāyama sāmāhe |

For b read jaṅginena mayobhuvā; for d vyāyame sahāmahe.

khaṇaḥ ca tvā jaṅgiṇaḥ ca viṣkandhād a
bhi muñcatām | aranyād aty ādyataḥ kṛṣyānyo rasebhyaḥ
z 1 z :

Read: ḥaṇaḥ ca tvā jaṅgiṇaḥ ca viṣkandhād abhi muñcatām |
aranyād anya ābhṛtaḥ kṛṣyā anyo rasebhyaḥ z 4 z 1 z

In a ḥaṇas, the reading of Ç., seems better; but khaṇas is not impossible.

It will be noted that our st. 1 is composed of hemistichs which are st. 1ab and st. 2cd in Ç.; Whitney suggests that the two hemistichs between have fallen out in the ms.: inserting them would bring this hymn to the norm of five stanzas. They read maṇim viṣkandhadūṣaṇam jaṅgiḍam bibhrmo vayam, and jaṅgiḍo jambhād viṣarād viṣkandhād abhiṣocanāt.

12. [f. 32a, l. 14.]

Ç. 2. 26.

yeha yantu paçavo yeyur vāyur yaśām mahatāram tujoṣā |
tvaṣṭā ye :

śām rūpayeyāni veda asmiṇs tām goṣṭhe savitā ni yacchāt. | :

Read eha and ye pareyur in a, yeṣām sahaçārām jujoṣa in b; in cd rūpadheyāni vedāsmiṇ tām.

imam goṣṭham paçavas sam sravantu vṛhaspatir ā naitu
prajānām. | si :

nīvalī nayatv agram eṣām ājinmukhe anumatir ni yacchāt. | :

Read nayatu prajānan in b, āgram in c: probably ājinmukhe in d.

sam sám sravantu paçavas sám āçvā huta pāuruṣāḥ sam
dhānyasyā sphā :

tibhis samśrāveṇa haviṣā juhomi |

In b read āçvā uta pūruṣāḥ; in c we probably have only a corruption of dhānyasya yā sphātis, which is the reading in Ç.

sañ sīncāmi gavām kṣī :

[f. 32b.] rañ sam ājyana balañ rasañ sañsiktāsmākam vīrā
mayi gāvaḥ ca gopa :

tāu

Read sīncāmi in a, ājyena in b, sañsiktā asmākam in c.

In the top margin of f. 32 b is written gāñ ṛcāñ.

ahnāmi gavām kṣīram ahaṛṣaṁ dhānyaṁ rasaṁ ahaṛiṣam
asmākam :

vīrāñ ā patnīm edam astakam z 2 z

Read: ā harāmi gavām kṣīram āhāṛṣaṁ dhānyaṁ rasaṁ |
āhāṛṣam asmākam vīrāñ ā patnīm edam astakam z 5 z 2 z

13. [f. 32b, l. 3.]

Q. 3. 14.

sām vat sṛjātv aryamā sām pū :

śā sañ vīhaspātiḥ sām indrá yo dhanañjaya ihā puṣyati
yád vasu | :

In a read vas, in c dhanañjaya; in d read puṣyata as in Q.,
or puṣyatu as Whitney suggests.

ihāiva gāva yeneho śakā iva puṣyata | iho yad ya pra
jāyadhvañ ma :

yi sañjñānam astu vaḥ

In ab read etaneho; in c I would incline to the reading
gāvaḥ for yad ya.

mayā gāvo gopatyaś sacadhvañ mayi vo goṣṭha iha :

poṣayāti | rāyas poṣeṇa bahulā bhavantīr jīvā jīvā :
ntīr upa vā sademā |

In a we might read gopatayas (= bulls), but gopatinā as in
Q. is better; read jīvantīr upa vas sadema in d.

sañ vo goṣṭhena suśādā sañ rayyā sañ sapuṣṭyā a :

harjātama yan nāma tena mas sañ sṛjāmasi |

Read aharjātasya in c, and tenā vas in d.

sañjānānām vihrātām a :

smin goṣṭhe karīṣiñīm bibhratīś somya haviś svāveṇā sa éta :
naḥ z 3 z

Read: sañjagmānā avihrutā asmin goṣṭhe karīṣiñiḥ | bibhratīś
somyaḥ haviś svāveṇā mā etana z 5 z 3 z

This stanza and the first appear MS. 4. 2. 10; the readings
of st. 5a and d are similar to those in MS.

14. [f. 32b, l. 11.]

Ç. 2. 32.

udyánn adityáṣ krimīn hantu sūryo nimrocaṁ raçmi :
bhir hantu ye ntaṣ krimayo gavī naḥ

Read ādityaṣ in a, nimrocan in b, and 'ntaṣ and gavi in c.

yo dviçīrṣā caturakṣaṣ krimi :
ç çārgo arjunaḥ hato hatatrātā krimin hatamahatā hataçvasā :

In b read krimis sārāṅgo, in c hatabhrātā krimir, and for
d hatamātā hatasvasā.

hato rājā krimīṇām 'utāi*ām sthapacir' hataḥ | hatāso sya
veṣa :

so hatāsaṣ pariveçasaṣ

In b read utāiṣām sthapatir, in c 'sya veçaso; in d pari-
veçasaḥ.

pa te çṛṇāmi çṛṅge yābhyā yattaṁ vi :
tadāyasi | atho bhinaddi taṁ kumbhaṁ yasmin te nihataṁ
viṣaṁ | :

In a read pra te çṛṇāmi, for b yābhyāṁ vitudāyasi; in c
bhinadmi, and in d nihitaṁ viṣaṁ.

a :

ttrivat tvā kṛme hanmi kaṇvavaj jamadagnivat. agastyāṁ
vrahmaṇā :

sarve te krimayo hatāḥ z 4 z

Read: atrivat tvā kṛme hanmi kaṇvavaj jamadagnivat |
agastyasya vrahmaṇā sarve te krimayo hatāḥ z 5 z 4 z

15. [f. 32b, l. 18.]

Ç. 2. 31.

indrāda yā mahi dṛṣa :
[f. 33a.] t krimer viçvasya tarhaṇī tayā pinaçma saṁ kṛmīm
dṛça vakhalvāṇ iva | dṛ :
ṣṭam adrṣṭam adruham atho kurīram adruhām | algaṇḍūna
sarvā çalūlāna :
krimaṇa vacasā jámbhayāmi | algaṇḍūna hanmi mahatā va-
dena :

dunāddunārasā bhuvanṁ | srṣṭām asṛṣṭī ny akilāsi ^{manācā} ^{vācān} ya :

thā krimīṇām nyakhilaçhavātāiḥ atvāhaṁtnyahaṁ çirṣa-
ṇyam a :

tho pārçvayaṁ kṛmīm avaskavaṁ yaraṁ krimīṇa vācasā
jāmbhayāma :

si ' ye krimayaṣ parvateṣu ye vaneṣu | ye oṣadhīṣu paçuṣv
apsv antaḥ :

ye smākām tanno sthāma caktrir indras tām hantu mahatā
vadhena | 5 z :

z a 3 z

Read: indrasya yā mahī dṛṣat krimer vicvasya tarhaṇī |
tayā pinaṁmi saṁ krimin dṛṣadā khalvāṁ iva z 1 z dṛṣtam
adrṣtam adruham atho kurīram adruham algāṇdūn sarvān
gaḷulān krimin vacasā jāmbhayāmasi z 2 z algāṇdūn hanmi
mahatā vadhena dūnā adūnā arasā abhūvan | sṛṣṭān asṛṣṭān
ni kirāmi vacā yathā krimīṇām †nyakhil acchavātāiḥ† z 3 z
anvāntnyam çirṇyam atho pārṣṭeyam krimin | avaskavam
vyadhvaram krimin vacasā jāmbhayāmasi z 4 z ye krimayas
parvateṣu ye vaneṣu ya oṣadhīṣu paçuṣv apsv antaḥ | ye smākām
tanvo sthāma cakrur indras tām hantu mahatā vadhena z 5 z
5 z anuvākaḥ 3 z

The reading of our ms. in st. 3c does not force upon us
anything different from the reading of Ç. — çīṣṭān aciṣṭān
ni tirāmi: and in st. 3d we probably have only a corruption
of the reading of Ç. — nakir ucchīṣatāi.

16. [i. 33a, l. 9.]

Ç. 2. 27.

yaç catṛṇ saṁjayāt sahamānābhibhūr asi | sāmūn pratiprāço :
jayarasā kṛṇv ovadhe | suparṇas tvām avidadat sukhacas
tvākhanam na :

sā | indras tvā cake hvo asurebhyas taritave | pāyas indro
vy āṣṇān ha :

ntavā asurebhyah | tayāham catṛṇ sakṣīye indraç cālāvṛkān i :
va rudra jalājabheṣaja nīlaçitva karmakṛt. prṣṇam durasyato :
jahi yo smān abhidāsati | tasya prṣṇam jahi yo na indrā-
bhidā :

sate | ādhi no vrūhi çāktibhiṣ prāçi mām uttaram kṛdhi
z 1 z :

Read: yā çatrūn saṁjayāt sahamānābhibhūr asi | sāmūn
pratiprāço jayarasān kṛṇv oṣadhe z 1 z suparṇas tvān avidat

sūkaras tvākhanan nasā | indras tvā cakre bāhāv asurebhyas
 staritave z 2 z pātām indro vy āgnād hantavā asurebhyah |
 tayāhan catrūn sāk-ya indras sālāvṛkāñ iva z 3 z rudra jalā-a-
 bheṣaja mlaçikhaṇḍa karmakṛt | prāçam durasyato jahi yo
 'smān abhidāsati z 4 z tasya prāçam tvam jahi yo na indrā-
 bhidāsati | adhi no vrūhi çaktibhis prāçi mām uttarām kṛdhi
 z 5 z 1 z

In Ç. the second hemistich of st. 1 is used as a refrain for six stanzas to which our st. 5 is added as a seventh; it is not beyond our ms. to fail utterly to indicate a refrain, but I have preferred to arrange in five stanzas. For st. 1a Ç. has nec chatrūn prāçam jayāti; elsewhere our ms. follows it closely.

17. [f. 33a, l. 16.]

Ç. 2. 30.

yathedaṁ bhūmyādi vātas tṛṇaṁ mathāyathi | eva maçṇāmi
 te mano ya :

thā mām kāmity aso evā mam atvāyasī |

In a read bhūmyā adhi. in b mathayati; in c mathnāmi, in d kāmīny, and in e mām abhyāyasi.

yemagaṁ patikāmā :

janikāmo ham āgamām. açvaṣ kanikradad yathā bhagenāham
 sahā :

gamaṁ |

In a read eyam agam. in b ham āgamam; in d sahāgamam.

sa cen nayātho açvinā kāmīnā saṁ ca neṣitaḥ sarvāñ
 ma :

[f. 33 b.] nāsy agmata mām cakṣūñṣi sama vratā |

In a read saṁ cen. in b nesathah; for cd we may read saṁ vām manñṣy agmata saṁ cak-ñṣi sam u vratā.

yád antāraṁ tadā bāhyaṁ yad bāhyaṁ tad anta :
 ram. kanyānām viçvarūpāñām mano grṇādh oṣadhe |

In a read tad; in d grṇitād is probably nearest to the reading of the ms.;—Ç. has grbhāya.

yas suparṇā rakṣā :

ṇa vā na vakṣaṇa vā ttrātānpitaṁ manah | çalyeva gulma-
 lūm yathā ' :

z 2 z.

VOL XXX Part III

15

Read: yās suparnā rakṣanā vā yās suparnā vakṣanā vā |
tatra ta arpitam manaḥ ṣaḥya iva kulmalam yathā z 5 z 2 z

This version of this stanza is fully as good as the version in Ç. but it does not help to relieve the obscurity.

18. [f. 33b. l. 4.]

Ç. 6. 38.

siṅhé vyāghrā utā yā pṛḍākāu tviṣir āgnāu vrahmaṇé sūrye :
yā | indram yā devī subhagā vavārdha sā ā nāitu vārcasā
sāmvi :

dānā |

Read vrahmaṇe in b; in d we might read sā ā na etu, but
sā na āitu, as in Ç., seems much better.

yā hastini dvīpini yā yā hiraṇyayé tviṣir āṣveṣu pú :
ruṣeṣu goṣu | indram yā devī subhagā vavardha sā ā nāitu
varca :

sā samvidānā |

In a read dvīpini yā hiraṇye: d as in st. 1.

yā rājanyè dundubhāv āyātāyām tviṣi :
r āṣvenāyām stanāyitnā goṣu yā indram yā devī subhagā
vavā :

rdha sā ā nāitu varcasā samvidānā |

In b we may safely read stanāyitnor gho-e, but for āṣvenāyām
I find nothing satisfactory.—unless perhaps āvināyām; to omit
yā after gho-e would improve the metre. Read d as in st. 1.

rāthe ākṣiṣu paribhāsva vā :
je parjānye vāte vāruṇasya ṣuṣme | indram yā devī subhā :
gā vavārdha sā ā netu vārcasā samvidānā |

In a read ak-ṣeṣu vṛṣabhasya vāje: d as in st. 1.

yā rudreṣu yā :
vasuṣv ādityeṣu marutsu yā | tviṣir yā viṣveṣu deveṣu sā nāi :
tu varcasā samvidānām. z 3 z

Read: yā rudreṣu yā vasuṣv ādityeṣu marutsu yā tviṣir viṣ-
veṣu deveṣu | indram yā devī . . . samvidānā z 5 z 3 z

This restoration of st. 5 is not entirely satisfactory but is
fairly plausible; it has no parallel in Ç. or in TB. 2. 7. 7. 1
and 2 where the rest appears.

19. [f. 33b, l. 14.]

yadi gādānām yadi nā :
 vyānām nadīnām pāre nṛpatis sakhā naḥ viṣve devāso abhi :
 rakṣatemaṁ yathā jīvo vidatham ā vidāsi | yady avāre ya :
 di vāgha pāre yadi dhanvini nṛpatis sakhā naḥ yady at sudṛ :
 tyām yadi samṛtyām nṛpatis sakhā naḥ adhasparmyatām
 adhane :

[f. 34a.] bhavānv ena sūryam maghavānam ṛtanyām viṣve
 devāso bhi rakṣatemaṁ | yā :
 thā jīvo vidātham ā vidāsi | imam mṛtyu mānam hīṁsīr
 yo mām :
 hṛdām anu sāca gopā | yo maham pipanti yom aham pi-
 parmi su :

prajasā vām maghavām sūrīr astu z 4 z

Read: yadi gādhānām yadi nāvyanām nadīmām pāre nṛpatis
 sakhā naḥ | viṣve devāso abhi rakṣatemaṁ yathā jīvo vidatham
 ā vidāsi z 1 z yady avāre yadi vāccha pāre yadi dhanvini
 nṛpatis sakhā naḥ | viṣve devāso ° ° z 2 z yady at svadhṛtvām
 yadi samṛtyām nṛpatis sakhā naḥ | viṣve devāso ° ° z 3 z
 †adhasparmyatām adhane bhavānv ena sūryam maghavānam
 ṛtanyām† | viṣve devāso ° ° z 4 z imam mṛtyo mānam hīṁsīr
 †yo mām hṛdām anu sāca gopā | yo maham pipanti yam aham
 piparmi† suprajasām maghavām sūrīr astu z 5 z 4 z

For st. 4ab we might perhaps write adha- pātyantām
 adhane bhavantu ye na sūrīm maghavānam ṛtanyān: but one
 could hardly insist upon it.

20. [f. 34a, l. 4.]

imā nāvam ā rohatā :
 ācchidrām pārayiṣṇūvam nārācaṁsasya yā grhē ṣatāritrā
 bhāgasya :

ca | upadho gulgunā yakṣmas saṁtv aghnyā | rudrasyeṣvā
 yātudhānā :

n atho rājño bhavasya ca rudrā vāiṣāte dvipadām catuṣ-
 padām taylor va :

yam aguvāke syāma | paktrīr vithvī pratibhūṣantī no vyaṁ de :
 vānām sumatāu syāma | praticī nāma te mātā ṣatavāro ha te :
 pitā | tato ha jajñiṣe tvam amirity arundhatī mātā nāmā :
 si mātṛtāu amṛtasyāiva vāsi arundhatī tvām sarvam abhijī :
 vam adhāyudham. z 5 z anu 4 z

For the first stanza we may read. imāṁ nāvam ā roha-
tācchidrāṁ pārayiṣṣvam | narācaṁsasya yā grhe çatāritrā
bhagaṣya ca. With much hesitation the following is proposed
for the second stanza: upabaddhā gulgulunāyaksṁās santv
aghnyāḥ | rudraṣyeṣvā yātudhānān atho rājño bhagaṣya ca.

To emend the rest and divide it into stanzas seems im-
possible; but a few points are clear. A stanza probably ends
with vayan devānāṁ sumatāu syāma. and for the first pāda
of this we might read rudro vā içāte catuṣpadāṁ; for the
other two pādas I can suggest nothing. Beginning with pratiçī
we have three good pādas of eight syllables each; in the rest,
which amounts to about one stanza I can suggest only the
possibility of reading mātṛto amṛtaṣyāivāsi.

We seem to have here a charm for protection of cattle:
and there are indications of the use of an amulet.

21. [f. 34 a, l. 12.]

Ç. 2. 36.

ā no agne sumatiṁ ska :

ndaloke idamām kumāryām mā no bhagena juṣṭā vareṣu suma :
neṣu valgur oṣaṁ patyā bhavati snuṁbhageyam |

In ab we may probably read with Ç. saṁbhalo gamed
imāṁ kumārīṁ saha no; in c read samaneṣu and in d bhavāti
subhageyam.

yam agne nārī pa :

tiṁ videṣtas somo hi rājā subhagam kṛṇotu suvānā putrā :
n mahiṣī bhavāsi gatvā patiṁ subhage vi rājā |

In a read iyam and vide-ṣta. in b subhagām kṛṇoti: in d vi
rājāḥ.

somoju :

[f. 34 b.] ṣṭo aryamnā saṁbhṛto bhaga dhātur devasya satyena
kṛṇomi patirvedanam. || :

For ab read somajuṣṭaṁ vrahmajuṣṭam aryamnā saṁbhṛtaṁ
bhagam. and in d pativedanam. Perhaps however the nomina-
tive may stand in ab.

yathākhaṁraṁ maghavam cārur eṣu priyo mṛgāṇām suṣadā
babhūva | yaṁ :

vayaṁ juṣṭā bhagasyāstu saṁpriyā patyāvīrādhayanti

For a read yathākharo maghavaṁc cārur eṣa; in c iyaṁ
vadhū.

bhagasya nā :

vam ā ruha pūrnām anuparasvatīm trayopah pūṣāhitam
yaṣ pati :

ṣ patikāsyam

In a read roha, in b anupadasvatīm; for c trayopa pūṣāhito,
and in d pratikāmyaḥ.

idaṁ hiraṇyam gulguluv ayas ūkṣo atho bhaga | e :
te patibhyas tvām adhuḥ patikāmāya vettave z 1 z

Read: idaṁ hiraṇyam gulguly ayam ūk-s-o atho bhagaḥ | ete
patibhyas tvām adus pratikāmāya vettave z 6 z 1 z

22. [f. 34 b, l. 6.]

Ç. 3. 17 (in part).

yunākta :

sīrā vi nu yugā tanotu kṛté kṣéttre vāpatehā bājam | vīrā-
jas su :

nīṣṭas sabharāṇchin no nediya it sṇyaḥ pakvām ā yuvam sī :
rā yunjanti kavāyo yugā vi tanvate pṛthak. dhīrā devēsu su :
mnayo anuḍvāhāṣ puruṣā ye kṛṇanti | lāṅgalam phālam su :
mana jisphātyā ṣṇam kenāḥ anv etu vāhām ṣṇam phālo
vina :

dann ayatu bhūmim ṣṇāsīrā haviṣā yó yājātrāi supippalā :
ōśadhayas santu tasmāi ṣṇanā naro lāṅgalena ānaḍūdbhiḥ :
parjanya bījam irya do | hinotu ṣṇāsīrā kṛ :

ṇutam dhānyena indraḥ sītām ni gṛhṇātu tām pūṣā māhyam
rakṣa :

[f. 35 a.] ntu sā naḥ pāyasvatī duhām úttarām úttarām sā-
mām | úd asthād rathajid go :

jíd aṣvajid dhīraṇyajit sūnṭayā pārvīrtah | ékaṣṣakreṇa savi :
tā rāthanorjo bhāgāiṣ pṛthivīm ety āpṛṇām z 2 z

There are just 24 pādas here but they do not fall readily
into stanzas: the first two are st. 2 and 1 in Ç. but our second
adds a pāda to Ç. 1: our third must end with santu tasmāi
but this gives five pādas the first of which seems out of place
here; in st. 4 it seems almost necessary to insert a pāda b in
accord with MS. We may read as follows:

yunakta sīrā vi nu yugā tanota kṛte kṣetre vāpateha bījam |
vīrājaḥ ṣṇuṣṭis sabhara asan no nediya it sṇyaḥ pakvam ā
yuvan z 1 z sīrā yunjanti kavāyo yugā vi tanvate pṛthak | dhīrā
devēsu sumnayav anuḍvāhaḥ puruṣa ye kṛvanti z 2 z lāṅ-
galam phalam sumanaji sphātyā ṣṇam kenāḥ anv etu vāhām

ṣṇaṁ phālo bhīṇaṁ etu bhūmim | ṣṇāsīrā haviṣā yo yajātāi
supippalā oṣadhayas santu tasmāi z 3 z ṣṇaṁ naro lāṅgale-
nānaḍudbhīr bhagaḥ phālāiḥ sīrapatir marudbhīḥ | parjanya
bījam irayā no hinotu ṣṇāsīrā kṛṇṇatāṁ dhānyāṁ naḥ z 4 z
indrah sitāṁ ni grhṇātu tāṁ pūṣā mahyāṁ rak-atu | sā naḥ paya-
svatī duhām uttarām-uttarāṁ samām z 5 z ud asthād rathajid
gojid aṣvajid dhiranyajit sūrtayā parivṛtaḥ | ekacakreṇa savitā
rathenoṛjo bhāgāiḥ pṛthivīm ety āpṛṇan z 6 z 2 z

Stanzas 1, 2, 3, and 5 here are 2, 1, 5, and 4 in C.; the other two appear MS. 2. 7. 12 and elsewhere. The omission of 4b can easily be accounted for by the similarity of endings. It might be a better arrangement to put the colon after sum-nayāu and take lāṅgalam ° ° in as st. 2e.

23. [f. 35a, l. 3.]

gavām grhā :

nām rasam oṣadhīnām anujyeṣṭham varca āyur vikāpyas
ma mā hiṁsiḥ :

pitāro vārdhamāno bhadrā gacchāṁsim abhi lokam ehi |

Read oṣadhīnām in a, vikāpyaḥ in b: for c I am inclined to propose mā mā hiṁsi-uh pitāro vārdhamānā, although the second person in d makes somewhat against this; in d I believe aṅgam is the third word so we might read bhadrā gacchāṅgam abhi lokam ehi, though bhadraṁ would seem better in some respects.

yādīdam bhaktam :

yadi vā vibhaktām kṣettram devānām yadi vā pitṛṇām |
ud u sūrya :

ud ite divā manuṣyavaḥ chivā no stū pṛthivī uta dyāuḥ.

With kṣetram in b the first hemistich may stand: at the end of c one naturally thinks of the contrast, gods and manes, so we might read ete devā manuṣyā vā or ud it te ° °; for d ṣivā no 'stu pṛthivy uta dyāuḥ.

ūrjo vām :

bhāgo varā pṛthivyām devāir dvāro vrahmaṇā vām dhāra-
yāmi | ṣivam ṣa :

gmam avasānam no stu ratiṁ devebhiḥ pitṛbhir manuṣyāiḥ

In a I think bhāgaṁ should be read, and varāya seems possible; in b perhaps devir would be good: read 'stu in c, and in d rātir might stand.

viçvāvaso :

stv āsadanam kulāyām gandharvā sovedaso mahyam ūcuḥ
ma mā hiñ :

sīç cheva dhīyanta heto çantan himaṣ pari dadhmo manu-
ṣyam

In a I think we may read stv āsadanam kulāyam, in b
gandharvās suvedaso; in c if we have second person we should
write mā mā hiñsīc çivā. but hiñsīc çivā if third person; I
do not think hetoç is possible; at the beginning of d çatan
himān is probable.

rudrā utse sa :

dam akṣīyamāṇe devā madanti pitaro manuṣyāḥ yam bhāgo
bhā :

gapateç ca devā urvīras taryā çaradas tarema z 2 z.

Read: rudrā utse sadam akṣīyamāṇe devā madanti pitaro
manuṣyāḥ | yam bhāgo bhāgapatiç ca devā †urvīras taryā†
çaradas tarema z 5 z 3 z

In some respects these stanzas seem to have a connection
with funeral rites. but their meaning and intent is wholly
unclear; the corrections proposed are based almost entirely on
palaeographic possibility and cannot be regarded as compel-
ling, or even satisfactory.

24. [f. 35a. | 13.]

yam a :

smin yakṣmaṣ puruṣe praviṣṭa iṣitam dāivyaṁ saha | agniṣ
ṭam ghr :

tavodano apa skandayatv atidūram asmāt. | so nyena sap
ṛçchatām :

tvam asmāi pra savāmasi | yas tvā yakṣmo deveṣita iṣitaṣ
pi :

[f. 35 b.] tṛbhiç ca yaḥ tasmāt tvā viçve devā muñcantu pary
aṇhasaḥ te te yakṣma :

m apa skandayatv adhi | ya tvam eno nyakṛtam yadā tvam
akṛtam āhrtaḥ ta :

smāt vā viçvā bhūtāni muñcantu pary aṇhasaḥ | tāni te
yakṣmam apa :

skandayatv adhi yad vā sādṛçā yad vā cakāra niṣṭyā tasmāt
tvā pṛ :

thivī mātā muñcatu pary aṇhasaḥ sā te yakṣmam apa
skandayatv ādhi | :

apaskandena haviṣā yakṣman te nāçayāmasi | tad agnir
 āha tad u :
 soma āha vṛhaspatis savitā tad indraḥ te te yakṣmam apa
 skandaya :
 tv adhidūram asmāt. so tyena mapṛçchatām tvam asmāi
 pra suvāmasi z :

z 3 z.

Read: yo asmin yakṣmaṣ puruṣe praviṣṭa iṣitam dāivyaṁ
 sahaḥ | agniṣ tam gṛtabodhano apa skandayantv atidūram
 asmāt | so anyena samṛchatām tvām asmāi pra suvāmasi z 1 z
 yas tvā yakṣmo deveṣita iṣitaṣ pitṛbhiḥ ca yaḥ | tasmāt tvā
 viçve devā muñcantu pary añhasaḥ | te te yakṣmam apa skan-
 dayantv atidūram asmāt z 2 z yat tvam eno 'nyakṛtaṁ yad ā
 tvam akṛtam āhṛtaḥ | tasmāt tvā viçvā bhūtāni muñcantu pary
 añhasaḥ | tāni te yakṣmam apa skandayantv atidūram asmāt
 z 3 z yad vā dadarça yad vā cakāra niṣṭyam | tasmāt tvā
 pṛthivī mātā muñcatu pary añhasaḥ | sū te yakṣmam apa skan-
 dayantv atidūram asmāt z 4 z apaskandena haviṣā yakṣmani te
 nāçayāmasi | tad agnir āha tad u soma āha vṛhaspatis savitā
 tad indraḥ | te te yakṣmam apa skandayantv atidūram asmāt |
 so 'nyena samṛchatām tvām asmāi pra suvāmasi z 5 z 4 z

The first stanza appears in the Pariçiṣṭas of the AV. 1b.
 1. 5. In stanza 3ab the sense seems to be "whatever sin or
 evil has laid hold on thee;" as a possibility consider yat tvām
 eno 'nyakṛtaṁ yad ā tvām akṛtam āhṛtam. The two pādas
 which stand at the end of 1 and 5 should doubtless stand at
 the end of the others also.

25. [f. 35b, l. 9.]

agne agrā indra balā ādityā ya ido iduḥ yudho :
 idhi pratiṣṭhitāya hotā jāitrāya juhuti | abhiyuktasya pradhane :
 naya vo rdhāram icchatām haviṣy agre vidyatām prati-
 grhṇāta juhvatām :
 jayatrā rājñā varuṇena jayatrā rudreṇa keçinā | bhavena ji :
 ṣṇunā jayeta parjanyaena sahīyasā astrā tām preṇa vṛṇhatā :
 astrā sarvyē ni yudhyatā | gandharveṇa tviṣīmatā rathenā
 upayo :
 dhinā | sinīvāly anu matir vāhāçvān iṣaṅgiṇaḥ jayanto
 bhi :
 prathatāmitrām sākam indreṇa medinā z 5 z anuvākam
 5 z :

For the first hemistich of st. 1 no reconstruction works out satisfactorily but for the second hemistich we might read yudho adhi pratiṣṭhitāya hotā jāitrāya juhōti. Pāda a of st. 2 seems good as it stands but the rest seems past mending. For the other three stanzas the following reading may be found acceptable: jāitrā rājā varuṇena jāitrā rudreṇa kecinā | bhavena jīṣṇunā jayeta parjanyaena sahiyasā z 3 z astrā †tām preṇa† vṛhatāstrā sarvena yudhiyātā | gandharveṇa tvīṣimātā rathenopayodhinā z 4 z sinivāly anu matin vāhācyān iṣāṅgiṇaḥ | jayanto 'bhi prathatāmītrān sākam indreṇa medinā z 5 z 5 z anuvākaḥ 5 z

Possibly mandreṇa might stand in st. 4a; and in st. 5b iṣvāṅgiṇaḥ might seem a good reading. This is surely a charm for success in battle.

26. [f 35b, l 17.]

yat svapne ni jagattha yad vā ṣepiṣe nṛtam agniṣ tāt tasmād enaso :

[f. 36 a] vrahmā muñcatv aṇhasaḥ yad akṣeṣu dudrohitam
yad vā mitrebhyas tvam somas
tvā :

tasmād enaso vrahmā muñcatv aṇhasaḥ yada kumāraṣ
kumāreṣu yad vā jyāya :

s tareṣu nimeta kṛtvā ṣepiṣe taṣat kṛṇvo agadam cīvam |
pratidīniphalam :

ha tvām apāmārga babhūvyathaḥ sarvām gaccha pathām
adhi marya yāvayā tvām | :

prā apāmārga oṣadhīnām viṣvāsām eka ut pati tena te
mrjuma āsthi :

tam atha tvam agadaṣ caraḥ z 1 z

Read: yat svapne ni jagantha yad vā ṣepiṣe 'nṛtam | agniṣ
tvā tasmād enaso vrahmā muñcatv aṇhasaḥ z 1 z yad akṣeṣu
dudrohitā yad vā mitrebhyas tvam | somas tvā tasmād . . .
z 2 z yat kumāraṣ kumāreṣu yad vā jyāyāns tureṣu | †nimeta
kṛtvā ṣepiṣe †taṣat kṛṇvo† agadam cīvam z 3 z praticinaphalo
hi tvam apāmārgo babhūvitha | sarvān mac chapathān adhi
varīyo yāvayās tvam z 4 z apāmārga o-adhīnām viṣvāsām eka
it patiḥ | tena te mrjma āsthitam atha tvam agadaṣ cara
z 5 z 1 z

In st. 2d it would probably be safe to read *kṛṇve*. St. 4 occurs Ç. 7. 65. 1. and st. 5 is Ç. 4. 17. 8.

27. [f. 36a. l. 6.]

Ç. 19. 36.

çatavāro anīnaçat rakṣamām rakṣān :
si tejasā | āroham varcasā saha mañir dunāmaçātanaṁ

In b read yakṣmān rakṣāṁsi. in c ārohan, and in d durṇa-
macātanaḥ.

çṛṅgabhyām rakṣo :
nudate mūlena yātudhānyaḥ | madhyena yakṣmaṁ bādgate
nāinaṁ papmāti tatratī | :

In a read çṛṅgabhyām, and in d pāpmāti taratī.

ye yakṣmāso arbhakā mahāmco ye ca çapathinaḥ | sarvān
dunnāmahā mañi :

ç çatavāro anīnaçat.

In b read mahānto, and perhaps we should read çabdinah
as in Ç.; in c read durṇāmahā.

çataṁ vīrāṇi janayaç chataṁ yakṣmann amāvapat. :
dunnāstris sarvās triḍhvā apa rakṣāṁsy apakramīm. |

In a read vīryāṇi janayaṁ, as suggested by Whitney; for b
çataṁ yakṣmān apāvapat: for cd durṇamnas sarvāns triḍhvāpa
rakṣāṁsy apākrāmī.

çatam aham dunnāmañi :
nām gandharvāpsarasām çataṁ çatam sunvatīnām çata-
vāreṇa vāraye z z z :

Read: çatam aham durṇāmninām gandharvāpsarasām çatam |
çatam ca çanvatīnām çatavāreṇa vāraye z 5 z 2 z.

28. [f. 36a. l. 13.]

Ç. 6. 71, with additions: TA. 2. 6. 2.

viçvaṁ vijmi pṛthivava puṣtam āyad āyatu prati grhṇāmy
annaṁ vāiçvānarasya ma :
hato mahimnā agniṣ tad viçvā suhitaṁ kṛnotu |

For this stanza cf. MS. 4. 11. 1. In a read vivyajmi pṛthivīva,
in b anyad āyat; in cd mahimnāgniṣ tad viçvaṁ suhutaṁ.

yad annam adbhir bahudhā :
virūpaṁ vāsu hiraṇyam aṇvam uta gām ajām avim yad
annam admy āṇṛtena de :

vā udāsyān uta vā kariṣyan. |

In a read admi. in b vāso and avim; in c anṛtena. and in
d dāsyann adāsyann uta °.

yan mā hutam yad ahutam ājagāma ya :
smād anna manasod rārajīmi z yad devānām cakṣuṣāka-
cīnāgniṣ ṭad dho :

tā suhutam kṛṇotu |

In b read annān; in cd it seems best to read with TA cak-
ṣuṣy āgo asty agniṣ ° °.

jamadagniṣ kasyapas sādṽ etad bharadvājo madhv annam || :
kṛṇotu | pratigṛhitre gotamo vasiṣṭho viṇvāmitro naḥ prati-
ranty āyuh :

pāṭhena pratirady āyuh zz 3 zz :

Read: jamadagniṣ kaṣyapas sādḥv etad bharadvājo madhv
annam kṛṇotu | pratigrahitre gotamo vasiṣṭho viṇvāmitro naḥ
pra tirantv āyuh z 4 z 3 z

29. [f. 36b, l. 1.]

agne yajñāsyā cakṣur edām vidāmi yathedaṁ bhaviṣyāti
svāhā | agne yajñāsyā :
crotram agne yajñasya prāṇa | agne yajñasyāpanaḥ agne
yajñasyātman agne :
yajñasya sarva idam vidāmi yathedaṁ bhaviṣyati svāhā
z 4 z :

Read: agne yajñāsyā cakṣur edam vidāmi yathedaṁ bhavi-
ṣyati svāhā z 1 z agne yajñāsyā crotram edam ° ° ° z 2 z agne
yajñāsyā prāṇa edam ° ° ° z 3 z agne yajñasyāpana edam ° ° °
z 4 z agne yajñasyātman edam ° ° ° z 5 z agne yajñāsyā sar-
vam edam vidāmi yathedaṁ bhaviṣyati svāhā z 6 z 4 z

In the margin the ms. has agni rcām.

30. [f. 36b, l. 4.]

RV. 1. 89. 2, 3; 10. 15. 2 (= Ç. 18. 1. 46); MS. 4. 14. 17.

devānām bhadrá sumatír ṛjuyatām devānām rātrír abhí nu
ni vārtatām. :

devānām sakhyām úpa sedimā vayām devānām āyuṣ prá
tirantu jīvā :

se |

In a read ṛjūyatām, in b rātir abhi no; and in d devā na
āyuṣ.

tān pūrvayā nividā hūmate vayām bhagaṃ mittrām aditir
dākṣam asrī :
dhīm áryamnām váruṇam somam açvínā sárasvatī nas
subhágā máyas karat. | :

In a read hūmahe, in b mitram aditiṃ and asridham; in c
aryamaṇam.

idám pitṛbhyo námo astv adyá yé pūrvāso yé párāsas
pareyúḥ yé párthi :
ve rájasy á niṣatā yé vā nūnam súvrjīnāsi vikṣú

In b read ye 'parāsas pary iyuh; in c niṣattā, and in d
suvrjanāsu.

pratyañco agne sarvaḥ :
patantu kṛtyākṛte ripave martyāyaḥ kravyād etṛṇa sâ me
mr̥ḍa krivi :
ṣṇu mā dhehi nirr̥ter upasthe

In a read sarvāḥ, in b martyāya. In c kravyād and me
mr̥ḍa seem clear, and probably kraviṣṇo at the end of c;
perhaps a subject for dhehi should be supplied before mā.
This stanza has no parallel.

jāyassaç çāñsād utá vā kánīyasaḥ sajā :
taççañsād utá jamiçañsā ánādiṣṭam anyákṛtam yád énas
tán nas tásmā :

j jātavedo mumugdhi z 5 z

Read: jyāyasaç çañsād uta va kaniyasas sajātaçañsād uta
jamiçañsād | anādhr̥ṣṭam anyakṛtam yad enas tan nas tasmā
jātavedo mumugdhi z 5 z 5 z

31. [f. 36 b, l. 13.]

imāu pādāu pra harāmy ā gṛhebhyaḥ tvāsta :
yendraṣ paçcād indraṣ purastād indro naṣ pātu madhyataḥ
Read svastaye in b; indraṣ paçcād in c.

indram bhayaṁ viçva :

taḥ çūdrā ca nāryā ca indraḥ pathibhir adrava asaṁṛddhā-
ghāya :

vaḥ

Read bhayan in a. cānāryā in b; in cd ā dravat asaṁṛddhā aghāyavaḥ.

indram haṣyatām vidhi vi naṣ pāçān ivā carat. | idamaṁ
panthā :

m adukṣāma sugo svastivāhanam |

In a we might read hr̥ṣyatām vidhir, or possibly har̥ṣyatām; for b vir naṣ °: for cd emam pantham arukṣāma sugam °. which is Ç. 14. 2. 8 cd.

yatra viçvā pari dviṣo vṛṇakti :

nindatesv āntam ety anāhataḥ parāvrajata kiṁ tat tava
kām vakṣana :

nn iva |

Read viçvān in a. and with ninditesv in b we have a possible reading. In the rest I see no good reading; perhaps parāvṛṇjata is intended.

viçvañco yantaḥ çaphalā viçvañcaḥ parimanthinaḥ viçvak. :
[f. 37 a.] punarbhavā mano asāṁṛddhāghāyavaḥ z

Read: viṣvañco yantu †çaphalā viṣvañcaḥ paripanthinaḥ |
viṣvak punarbhuvā mano asaṁṛddhā aghāyavaḥ z 5 z.

In a çabalā would seem very good: pādas cd occur Ç. 1. 27. 2 cd which has connections into which our stanzas evidently fit (cf. Whitney's Trans.).

svasti vyacākaṁ svasti pratyucā :

kaçam svasti paridigdham ny apa svasty apsantaḥ pari-
vrajam svariya svastena sa me :

bharad vājam svasti punarāyaṇam z 6 z anu 6 z

In the top margin the ms. gives svasty ꣳca °.

Out of this I have been unable to make anything more than the division of words may indicate. except that apsantaḥ is probably for apsv antaḥ.

For ab see below No. 90. 2 and Q. 6. 9. 2; for cd cf. Q. 3. 18. 6.

ūrdhvāni te lomāni tiṣṭhantv akṣāu :
kāmena ṣiṣyatām simida vatsena gāur iva udhnā surāiva
paṣyatām |

In a read tiṣṭhantv. for b akṣyāu kāmena ṣiṣyatām; in c
ṣimivātā and probably gor. in d ūdhnas and sriyatām rather
than paṣyatām.

imā :
gāvas sabandhavas samānam vatsam akrata ' hiññati kani-
kratīr āddhārā ni :

ravid vaṣā

A possible reading for c would be mahimnābhikanikratīr,
which carries one on to think of something like arāvīd vṛṣā
at the end of d.

ṛṅgopasā galabhūṣā aghnyāḥ carmavāsini | gavo ghṛta :
sya mātaraḥ tā vatsevā nayāmasi z 2 z

Read: ṛṅgāupaṣā galabhūṣā aghnyāḥ carmavāsiniḥ | gāvo
ghṛtasya mātaraḥ tā vatsa iva nayāmasi z 5 z 2 z

34. [f. 37a. l. 16.]

yaḥ ca varcaḥ kanyāsu yaḥ ca :
hastiṣv āhitam hiraṇyeṣu tad varcas tasya bhakṣī iha var-
casah

Read yac ca in a and b; in d bhakṣīya or bhakṣiḥa.

yaḥ ca :
varco rājarather yaḥ ca rājasv āhitam niṣke rukṣe yad
varcas tasya bhakṣī i :

ha varcasah

Read yac in a and b; d as above: in a rājarathe seems
good.

yad apsu yad vanaspatāu yad agnāu yaḥ ca sūrye
yajñe dakṣi :
ṇāyām varcas tasya bhakṣī iha varcasah

Read yac ca in b; d as above.

varcasvān me mukham astu va :
[f. 37 b.] rcasvatāmdu me ciraḥ varcasvām viḥvataḥ pratyān
varcasvām varṇo stu me z

Read varcasvan in a. varcasvad uta in b; varcasvān and
pratyān in c. and varcasvān varṇo 'stu in d.

subhagam :

me mukham astu subhāgam uta me çiraḥ subhāgo viçvataḥ
pratyañ subhāgo va :

rṇo stu me z 2 z

Read: subhagam me mukham astu subhagam uta me çiraḥ |
subhago viçvataḥ pratyañ subhago varṇo 'stu me z 5 z 3 z

35. [f. 37 b, l. 3.]

ud amāu sūryo agāt sahavat ta nāma ma | aham te madhuma :
tī madhugām madhumattarā |

Read asāu in a, tan nāma mama in b; madughān in d.

yad giriṣu parvateṣu goṣv açveṣu yan madhu | :
surāyām sicyamānāyām kīlāle madhu tan mayi |

Read giriṣu in a.

yathā surā ya :

thā madhu yathākṣā adhidevane yathāha gavyato mana
evā sām abhi te :

manaḥ

Read mām in d. Cf. Q. 6. 70. 1 for ab.

yā te padam padena ṛṣyatām manasā manaḥ pratyañcam
agrabham tvā a :

çvam ivāçvābhidhānyā |

Read yathā in a, padenarṣyatām in ab; pratyañcam in c.
and tvāçvam in cd.

mahyañ tvā dyāvāpṛthivī mahyañ devī sarasva :
tī | mahyañ tvā madhyañ bhūmyā ubhāv antāu sam
asyatām z 4 z

Read: mahyañ tvā dyāvāpṛthivī mahyañ devī sarasvatī |
mahyañ tvā madhyañ bhūmyā ubhāv antāu sam asyatām z 5 z 4 z

For this last stanza cf. below, No. 90 st. 5. and Q. 6. 89. 3.

36. [f. 37 b, l. 9.]

yā vāiçvade :

vīr iṣāvo yā vasūnām yā rudrasya somasya yā bhagasya |
viçve devā i :

ṣavo yāvatīr vas tā vo agninā çarmaṇā çamayāmi |

Read iṣavo in a.

yā ādide :

vīr iṣavo yā vasūnām yā rudrasya açvino yāvatīs tāḥ viçve
devā iṣa :

vo yāvatīr vas tā vo devas savitā çamayāti |

Read in b rudrasyāçvinor; the visarga indicates that the hemistich ends with tāḥ and yāvatis seems out of place here, where another genitive would be appropriate; a possible reading might be yā vṛhaspatēḥ.

yas te gñiṣavo vāta yāḥ

te apām uçchṛityām uta vā marutsu | indrasya sāmñā
varuṇasya rājā tāḥ
vat sūryo vṛhatā çamayāti |

Read for a yās te 'gna iṣavo vāta yās te, in b probably utsṛṣtyām; in c rājñā, and in d tā vas seems better than tāvat.

mā vṛhy ādityo mā vasubhyo mā rudrāyāḥ

gnaye pāktivāya | indrasya çuco varuṇasya yā çucis tā vo
devy aḥ

ditīç çamayāti |

In a mā bibhrhy āditya seems possible, in b pāṛthivāya.

yāç ca vāte viçvāgvāte yāç ca rudrasya dhanvani | agniḥ
ṣ ṭva vasor īrāçānas tvā sarvā bheṣajaṣ karat. z 5 z anuvā 7 z:

Read: yāç ca vāte viṣvāgvāte yāç ca rudrasya dhanvani |
agniṣ ṭvā vasor içānas tvā sarvā bhiṣajaṣ karat z 5 z 5 z
anuvā 7 z. In cō ṭā and tās would improve this very uncertain reconstruction.

37. [f. 37 b, l. 19.]

cittim yaktāsi manasā cittin devāñ ṛtāvṛdhaḥ jātavedaṣ pra
ṇas tiḥ

[f. 38 a] ra agne viçvāmarudbhīḥ

In view of MS. 2. 10. 6 it seems clear that in yaktāsi we have the root yaj; yak-sasi might be the reading, but yak-ṣāmi may be worth consideration. If viçvāmarudbhīḥ is not acceptable, we might read vidvan or viçvan.

yavayāyavayāssad dveṣāñsi yavamayeḥ

na haviṣā yas te mṛta dviṣvapnīyasya bhāvas sa te tudanta
etañ praḥ

hinmaḥ

In a read yavayāsmad; in c dussvapnīyasya. and perhaps mṛto rather than mṛta. In Ç. 19. 57. 3 occurs the phrase sa mama yaḥ pāpas tañ dviṣate pra hinmaḥ; imitating this we might reconstruct dviṣate tudanta °, and this would call for bhāvo.

yathā kalām yathā çapham yatharṇo son nayanti | evā:
dussvapnyam sarvas apriye sun nayāmasi z

This is Ç. 6. 46. 3 (= 19. 57. 1): read yatharṇam sam in b,
sarvam in c and sam in d.

araro hiç çatam adya ga:
gavām bhakṣīya çatam ajānām çatam avinām çatam açvā-
nām puruṣā:
ṇām tatrāpi bhakṣayāmum āmuṣyāyaṇam amuṣyāḥ patram
tam aham:
nirṛtaye prekṣyāmi tam mṛtyoḥ pāçaye badhnyāmi sa baddho
hato stu | :

sa tato mā mociḥ z 1 z

This prose portion falls into two parts thus giving the normal
five stanzas to this hymn. At the beginning araro might be
votive of araru (cf. Ç. 6. 46. 1) and hiç might conceal some
form of the root hiç: read †araro hiç† çatam adya gavām
• • • puruṣānām tatrāpi bhakṣīya z 4 z

For the rest there are similar passages in Ç. 16. 7. 8 and
8. 1ff. Read: amum āmuṣyāyaṇam amuṣyāḥ putram tam aham
nirṛtaye prekṣyāmi tam mṛtyoḥ pāçe badhnāmi | sa baddho hato
•stu sa tato mā moci z 5 z

With this hymn cf. Ç. 6. 46 and 19. 57.

38. [f. 38a. l. 8.]

ye naç çapanty apa te bhavantu vṛkṣān va:
vṛṇām api tām jayāma bhrājīya āyus pratiram dadhānām va:
yam devānām sumatāu syāma

In b I think we must read vṛkṇām api tām; the margin cor-
rects to drāghīya in c, and we must read dadhānā: pādas cd
occur frequently but not together.

kṛtyākṛtaṁ payasvān adarçata agneḥ | :
pratyasva nu dhuddhyasva prati sma rāivatam dahaḥ |

For b. a possible reading is ā dharṣata agniḥ; in c prathasva
and yudhyasva are probable; d can stand, but riçato, or the
like, would seem better.

yas tvā kṛtye pratighā:
ya vidvān aviduṣo gṛham. | punas tvā tasmā dadhimo
yathā kṛ:

kṛtaṁ hanah

In pratighāya, I think, lies the verb of the first hemistich
and we might read pra jaghāna as a possibility: in c it would
seem safe to restore tasmā dadhmo, and in d kṛtyākṛtaṁ hanat.

punaṣ kṛtyām kṛtyākṛte hastigṛhya parā ṇaya uto tva:
m uttamā punas tatarmāiva sudanamśvam |

Read hastagṛhya in b: uto tvam uttamā punas is probably
a good pāda but for d I see nothing. Pādas ab occur Ç. 5.
14. 4 ab.

kṛtyā yantu kṛtyākṛtaṁ vṛkī:
vāvimato gṛhaṁ stokaṁ pākasva vardhatām ma vṛvṛṣṭa |
oṣadhīr iva | :

Read: kṛtyā yantu kṛtyākṛtaṁ vṛkīvāvimato gṛham | stokaṁ
pākasya vardhatām samvṛṣṭa oṣadhīr iva z 5 z 2 z

Ç. 6. 37. 1 d reads vṛka ivāvimato gṛham.

39. [f. 38a, l. 16.]

Vāit. 24. 1.

yat te grāvā bāhucyuto cakro naro yad vā te hastayor
adhukṣaṁ tat tāpyā:

yatām ut te niṣṭyāyatām soma rājan. z

In a read 'cucyon, in b adhukṣan; ta āpyāyatām tat in c.

yat te grābṇā cicṛdas so:
ma rājin priyāṇy aṅga sukrṭā paroṇi | tat samjatsvājeneto:
vardhayasvā anāgamo yathā sadam it samkṣiyema z z om
anā:

[f. 38b] gamo yathā sadam it samkṣiyema

In a read grāvṇā cicchidus and rājan, in b purūṇi; for ed
tat samdhatsvājeneta vardhayasvānāgasas ° °.

yām te tvacam babhrutām ta yonir hr̥dyām:
sthānā pracyuto di vāsuto si tasmāi te soma luptam asmākam
etad u:

pa no rājan sukr̥te hvayasva |

In a read bibhidur yām ca yonim, in b sthānāt and yadi
vāsuto 'si with yad vā (as in Vāit.) for hr̥dyām; in c we may
read guptam as in TB. 3. 7. 13. 3.

sam prāṇāpānābhyām sam cakṣuṣā sam:
çrotreṇa gacchasya soma rājan. | yat te viliṣṭam sam u tanv
ayattaj jā:

nītām nas saṅgamanī pathīnām.

In b read gacchasva; in c viriṣṭam sam u tat ta etaj, in d
jānitām and saṅgamane.

ahaç çarīraṃ payasā sam etv a :
 nyo nyo bhavati varuṇosya | tasmāi tado haviṣā vidhemaḥ
 vayaṃ syāma :

patayo rayiṇām.

In a read ahāç and sam ety, in b anyo 'nyo and varṇo 'sya;
 in c ta indo and vidhema.

abhyakṣaranti jihvo ghr̥tenāgā parūṇṣi ta :
 vardhayantī | tasmāi te soma nasa yad viṣaṭ vapa no rāja
 sukr̥te hvaya :

sva z 3 z

Read: abhikṣaranti juhvo ghr̥tenāgā parūṇṣi tava vardhay-
 anti | tasmāi te soma nama id vaṣaṭ copa no rājan sukr̥te
 hvayasva z 6 z 3 z

40. [f. 38 b, l. 9.]

ihata devīr ayam astu pantha ayam vo lokaç çaraṇāya :
 sādhuḥ idaṃ havir juṣamānā ud ita kṣiprā jñā varuṇena
 prasūtā z :

In a read ihāita and panthā; in d kṣiprā rājñā and prasūtāḥ.

ihata rājā varuṇo dadābhīr devo deveṣu haviṣo juṣātāḥ kṛṇu :
 ṣva panthā madayān dūrdibhir anena babhro mahatā pṛthi-
 vyām.

In a the reading of the ms. may be ṛdābhīr. Read in a
 ihāitu; in this context dadhabhīr seems to be possible but it
 is hard to give up the thought of some form or compound of
 ṛta; in MG. 2. 11. 17 occurs prāitu rājā varuṇo revatibhiḥ:
 in b juṣatām ought to stand. In c read panthām, and we
 might consider dṛtibhir as a possibility.

pri :
 yad dhriyad va madayān abhuñja tirokoghānām iha rāṇitu | a :
 neneve gām mṛjata dviṣīmato jahy osrām çabhūm ajanān
 adhr̥ṣṇataḥ | :

Out of this all I can get is tviṣīmato jahy and perhaps
 çatrūn ajanān ādhr̥ṣataḥ.

ye pārato madhyato ye ca yanta ye apsumado nihatās tīre
 agnayāḥ :
 te devajā iha no mṛdunn āpaç cā jihvan ubhaye saban-
 dhavaḥ

Opposite the first of these lines the margin gives *saṁcayān*, and there is a correction to *jinvan* over *jihvan*. In a read *yanti*, in b *apsuśado nihitās*; in c *mṛdann* and in d *ta ā jinvan*.

idaṁ :

vāpo hṛdayam ayaṁ vasv aritāvarī iha tvām eta çakvarī
yatrāivam :

veçayāmasi z 4 z

Read: idaṁ va āpo hṛdayam ayaṁ vatsa ṛtāvarīḥ | ihettham
eta çakvarīḥ yatrāivam veçayāmasi z 5 z 4 z

This is Ç. 3. 13. 7; we might read *idaṁ vasv* in b; for d
Ç. has *yatreḍam veçayāmi vaḥ*.

41. [f. 38b, l. 18.]

RV. 10. 159; ApMB. 1. 16.

ud asāu sūryo agād ud ayaṁ māsako :

bhagaḥ tenāham vidvalā patim abhy a :

[f. 39 a.] sāksī viṣāsahīḥ |

Read *māmako* in b.

ahaṁ ketur ahaṁ mūrdhvā ahaṁ ugrā viṣāda :
ni | named *apa kradam patis sehānāyā upacarā* |

Read *mūrdhāham* in a, *viṣādani* in b; named *apa kratum*
in c and *upā carāt* in d.

mama putrā :

ç çattruḥaṇo vo me duhitā virāt. | utāham asmi saṁjayā :
patyār me çloka uttamah

Read *çattruḥaṇo* 'tho in ab; *patyur* in d.

yena devās surebhyo bhavanti marmattarā :
idaṁ utakra devāsapattrā kilābhuvam

In a a good reading would be *devā asurebhyo*; for b read
bhavanty amarantārāḥ, and for cd *idaṁ tad akri devā*
asapatnā kilābhuvam.

sapattrā sapatnyaghnī :

jayaty abhibhūvarī muṣṇāmy anyāsām bhagam vāmo yaste-
yaçā :

m iva z 5 z anu 8 z

Read: *asapatnā sapatnaghnī jayanty abhibhūvarī* | *muṣṇāmy*
anyāsām bhagam varco astheyasām iva z 5 z 5 z anu 8 z

In d *vāmam* would be about as good as *varco*. This hymn
has a sixth stanza in the other texts.

42. [f. 39 a, l. 7.]

Cf. Ç. 2. 24.

ṣarabhaka ṣeraṣabha punar bho yā :
 nti yādavaṣ punar hatiṣ kimīdinaḥ yasya stha dam atta yo
 va prā :
 hī tam utta mmā sāmsāmany atā ṣevṛka ṣevṛdha sarpān-
 sarpa :
 srokān mro jyarnyatro jarjunva paprado punar vo yanti
 yādavaḥ | :
 punar jūtiṣ kimīdinaḥ yasya stha dam atta yo na prā | hī
 tam utva :

smā māmsāny attā z 1 z

Read: ṣarabhaka ṣerabha punar vo yantu yātavaṣ punar
 hetiṣ kimīdinaḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
 svā māmsāny attā z 1 z ṣevṛdhaka ṣevṛdha punar vo ° | ° z
 2 z sarpānūsarpa ° ° | ° z 3 z mrokānumroka ° ° | ° z 4 z
 †jyarnyatro jarjunva paprado† punar vo yantu yātavaṣ punar
 jūtiṣ kimīdinaḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
 svā māmsāny attā z 5 z 1 z

At the beginning of 5 it would be impossible to emend
 with any certainty; it is barely possible that jūrṇi (Ç. st. 5)
 is there and perhaps also arjuni (Ç. st. 7); yet it is fairly
 clear that these should all be grouped in one stanza, and
 that they are names of male demons. Cf. our No. 91 and the
 comments.

43. [f. 39 a, l. 12.]

Ç. 2. 16.

dyāvaprthivī upaṣrute mā :
 pātām svāhā | dhanāyāyuse prajāyāi mā pātām svāhā | prāṇā :
 pānau mṛtyor mā pātām svāhā | sūrya cakṣuṣī mā pāhi svā :
 hā | agne viṣvambhara viṣvato mā pāhi svāhā |

Read dyāvaprthivī upaṣruter: the kṇṇḍa is no. 2.

44. [f. 39 a, l. 15.]

Cf. Ç. 2. 17.

āyurmā :
 agni āyur me dhā svāhā varcodāgner varco me dhā svāhā tejo :
 dāgnis tejo me dhā svāhā | sahodā agnes saho me dhā svāhā :
 baladā agnir balam me svāhā z 3 z

Read: āyurdā agna āyur me dāḥ svāhā z 1 z varcodā agne varco me dāḥ svāhā z 2 z tejodā agne tejo me dāḥ svāhā z 3 z sahodā agne saho me dāḥ svāhā z 4 z baladā agne balam me dāḥ svāhā z 5 z 3 z

45. [f. 39 a, l. 18.]

Ç. 2. 17.

āyur asyā ā :

[f. 39 b.] āyur me dhehi svāhā | varco si varco mayi dhehi svāhā | tejo :

si tejo mayi dhehi svāhā | saho si saho mayi dhehi svāhā | : ballam asi balam mayi dhedhi svāhā | 4 z

In 1 read āyur asy āyur mayi; in 2, 3, and 4 read 'si; in 5 balam and dhehi.

46. [f. 39 b, l. 3.]

Ç. 2. 18.

piçācakṣī :

nam asi piçacajambhanam asi svāhā | yātudhānakṣīṇam a : si yātudhānajambhanam asi svāhā | sadānvākṣīṇam asi : sadānvājambhanam asi svāhā | sapattrakṣīṇam asi sapattra : jambhanam asi svāhā | bhrātrvyakṣīṇam asi bhrātrvyajaja : mbhanam asi svāhā z 5 z a 9 z

Read *ksayanam in each formula, piçacajambhanam in 1, sapatna° in 4, and bhrātrvyajambhanam in 5. The kaṇḍa is no. 5.

In the margin the ms. has rakṣāmantram vā agniḥ.

47. [f. 39 b, l. 8.]

ā te sāuvīryam :

dade mayi te sāuvīryam | a sāuvarco dade mayi te sāuvarcaḥ : a sāutejo dade mayi te sāutejaḥ a sāunṛmṇam dade mayi : te sāunṛmṇam | ā te sāuçukram dade mayi te sāuçukram

z 1 z :

At the beginning of 2, 3, and 4 read ā te.

48. [f. 39 b, l. 12.]

C. 2. 19.

om̐ agna yat te tapas tena tam̐ prati tapa yo smān dveṣṭi
 yaṁ ca vāya :
 n dviṣmaḥ z te haras tena tam̐ prati hara yoḥ te çocis
 tena tam̐ prati :
 çoca te rcis tena tam̐ praty arca | agne yat te jyotis tena
 tam̐ prati da :
 ha yo smān dveṣṭi yaṁ ca vāyaṁ dviṣmaḥ z 2 z

Read: agne yat te tapas tena tam̐ prati tapa yo 'smān
 dveṣṭi yaṁ ca vāyaṁ dviṣmaḥ z 1 z agne yat te haras tena
 tam̐ prati hara ° ° ° z 2 z agne yat te çocis tena tam̐ prati
 çoca ° ° ° z 3 z agne yat te 'rcis tena tam̐ praty arca ° ° ° z 4 z
 agne yat te jyotis tena tam̐ prati daha yo 'smān dveṣṭi yaṁ
 ca vāyaṁ dviṣmaḥ z 5 z 2 z

49. [f. 39 b, l. 15.]

prācī di :
 g gāyatraṁ devatā yad deveṣu pitṛṣu manuṣyeṣu naç çakā-
 rāya :
 ttaṁ tasyāvedanam asi z svaṁ cemam asmād yakṣa tas-
 mād āma :
 [f. 40 a.] yetu svāhā | dakṣiṇā dig rathantaraṁ devatā pratīcī
 dig vāmadevaṁ :
 devatā udīcī dig yajñāyajñiyaṁ devatā ūrdhvā dig vṛhaddeva :
 tā yad deveṣu manuṣye | çva naç cakārāyattaṁ tasyāvedanam
 asi z muṁ :
 cemam asmād yakṣa tasmād āmayatu svāhā z 3 z imaṁ
 rakṣā :
 mantram̐ digdhandhanaṁ z z

Read: prācī dig gāyatraṁ devatā yad deveṣu pitṛṣu manu-
 ṣyeṣu naç cakārāyattvaṁ tasyāvedanam asi | saṁ cemam asmād
 yaccha tasmād āmayatāt svāhā z 1 z dakṣiṇā dig rathantaraṁ
 devatā ° ° ° z 2 z pratīcī dig vāmadevaṁ devatā ° ° ° z 3 z
 udīcī dig yajñāyajñiyaṁ devatā ° ° ° z 4 z ūrdhvā dig vṛhad
 devatā yad deveṣu pitṛṣu manuṣyeṣu naç cakārāyattvaṁ tasyā-
 vedanam asi | saṁ cemam asmād yaccha tasmād āmayatāt
 svāhā z 5 z 3 z

These formulae are suggestive of the sphere of the Yajur Veda. The emendation proposed is open to a number of objections, but it is fairly close to the ms. and offers a reasonable meaning. In the colophon we might read digdhanam.

50. [f. 40 a. l. 5.]

agnim vayam trātāram havāmahe imam trāyā :
tāsmād yakṣmā tasmād āmayata juṣāṇo agnir ājyasya trātā :
trāyatām svāhā |

Read ya imam trāyate 'smād yak-māt tasmād āmayatāt |
juṣāṇo ° ° z 1 z

mitrāvaruṇāu vayam trātārāu havāmahe yā :
v ayimam trāyīte smād yakṣma tasmād āmayata juṣāṇāu
mitrā :

varuṇāv ājyasya trātārāu trāyetām svāhā |

Read yāv imam trāyete 'smād yakṣmāt tasmād āmayatāt |
ju-āṇāu ° ° z 2 z

marutān vayam trātrī :
n havāmahe imam trāyānta smād yakṣmād āmayata |
juṣāṇāu maru :
tājyasya trātāras trāyantām svāhā z

Read maruto vayam trātrīn havāmahe ya imam trāyante
'smād yakṣmāt tasmād āmayatāt | ju-ānā maruta ājyasya °
° z 3 z

agnaya ghṛtapataye svāhā | :
agnināgni gr̥hebhya svāhā | vājasyān agniye svāhā | agnim :
vayam svāgnaya svāhā | tena vrahmaṇā tenaḥ chandasā
tayā devatayā :

ñgirasvad devebhyas svāhā z z iti agnisūktam. z z :

It is almost impossible to believe that these formulae belong in this place, thrust into the midst of five stanzas so symmetrical; but we cannot throw them out entirely. The first and last are in the Concordance: in 1 read agnaye, for the second perhaps agnināgne gr̥hebhya svāhā can stand, vājasya is good at the beginning of 3 and agnaye should be read, in 4 svagnaya is probable, and in 5 read tena for tenaḥ; perhaps in 5 we should insert dhruvās sīdata (or the like) before devebhyas, as these words appear in the numerous occurrences of this formula.

pitṛṇ vayam bhrātṛṇ havāmahe | imam trāyantāmmābh
yakṣmā tasmā :

d āmayata | juṣaṇāṣ pitarājyasya trātāras trāyantām svāhā z :

Read vayam trātṛṇ and the rest as in st. 3 except juṣaṇāṣ
pitara.

vṛhaspatim vayam trātāram havāmahe imam trāyātāsmād
yakṣmā :

tasmād āmayata juṣāṇo vṛhaspatir ājyasya trātāram trā :
yatām svāhā z 4 z

Read : vṛhaspatim vayam trātāram havāmahe ya imam trāyate
'smād yakṣmāt tasmād āmayatāt | juṣāṇo vṛhaspatir ājyasya
trātā trāyatām svāhā z 5 z 4 z

51. [f. 40 a, l. 19.]

agnim vayam trātāram yajāmahe meni :

[f. 40 b] hana valagahanam juṣāṇo agnir ājyasya menihā
valagahā :

trātā trāyatām svāhā z indram vayam juṣāṇa indra ājyasya z :
somaṁ vayam trātāram yajāmahe menihalaṁ valagahanam
juṣā :

ṇas soma ājyasya menihā valagahā trātā trāyatām svā :
hā z viçvān devāṇs vayam trātṛṇ yajāmahe menighno valaga :
ghnās trātāras trāyantām svāhā z vṛhaspatim vayam trātāram :
yajāmahe menihalaṁ valagahanam juṣāṇo vṛhaspati | :
r ājyasya menihā valagahā trātā trāyatām svāhā z 5 z :
z anu z

Read : agnim vayam trātāram yajāmahe menihanaṁ valaga-
hanam | juṣāṇo agnir ājyasya menihā valagahā trātā trāyatām
svāhā z 1 z indram vayam ° ° | juṣāṇa indra ājyasya ° ° z 2 z
somaṁ vayam ° ° ° | juṣāṇas soma ājyasya ° ° z 3 z viçvān
vayam devāṇs trātṛṇ yajāmahe menighno valagaghnaḥ | juṣāṇā
ājyasya menihano valagahanas trātāras trāyantām svāhā z 4 z
vṛhaspatim vayam trātāram yajāmahe menihana valagahanam
juṣāṇo vṛhaspatir ājyasya menihā valagahā trātā trāyatām svāhā
z 5 z 5 z anu 10 z

52. [f. 40 b, l. 9.]

TB. 2. 7. 17.

ye keçinaṣ prathamās satram asita yebhir ābhṛtaṁ :
yad idam vi rocate bhyo juhomi haviṣā ghṛtena açvān goma :
mān ayam astu vīrāḥ

In a read āsata, in c tebhyo; in cd ghr̥tenāçvavān gomān ° ° vīraḥ. Our pāda d is very nearly Ç. 6. 68. 3 d; TB. has rayas poṣeṇa varcasā sam̐ sr̥jātha.

nante rānās tapaso mucyate śudvinā:
vnīyaṁ dīkṣāṁ viçanīyaṁ hy etat. prāpya keçāstuvate kā:
ṇyano bhavantu teṣāṁ vrahmeçe vapanasya nāmnyā

In a read narte vrahmaṇas, and śudvināmpīyaṁ vaçinīyaṁ hy etat would give a good pāda b; TB has dvināmnī dīkṣā vaçinī hy ugrā. For the rest it seems best to read with TB pra keças suvate kāṇḍino bhavanti teṣāṁ vrahmed içe vapanasya nānyaḥ z 2 z

yenāvapat sa:
vitā çirṣṇo agre kṣureṇa rājño varuṇasya keçān. | :
tena vrahmāṇo vapatedam asyāçyāmo dīrghāyur ayam astu :
vīraḥ z

In cd asyāyuṣmān seems the most satisfactory. Cf. Ç. 6. 68. 3 and Whitney's Translation.

ma te keçām anugada vanta etat tayā dhātā dadhā:
tu te | tubhyam indro varuṇo vṛhaspatis savitā varco dadhām | :

In a read mā te keçān anugād varca, in b tathā; in d dadhan. This stanza appears MG. 1. 21. 8.

ā roha proṣṭham̐ viṣahasya çatṛṇ ājasrādīkṣāṁ vaçinī:
hy ugrā | dehi dakṣiṇām̐ vrahmaṇebhyo atho mucyasva varu:
ṇasya pāçāt. z 1 z

Read: ā roha proṣṭham̐ viṣahasva çatṛṇ ājasraṁ dīkṣā vaçinī hy ugrā | dehi dakṣiṇām̐ vrahmaṇebhyo atho mucyasva varuṇasya pāçāt z 5 z 1 z

53. [f. 41a. 1. 1.]

MS. 2. 6. 3.

ye devāṣ purassado gninetṛā rakṣohaṇas te naṣ pā:
ntu tebhyo namas tebhyas svāhā | ye devā dakṣiṇāsado
yamanetrā rakṣohaṇa:
s te naṣ pāntu tebhyo namas tebhyas svāhā | ye devāṣ
paççātsado marunnetṛā rakso:
haṇas te naṣ pāntu tebhyo namas tebhyas svāhā | ye devā
uttarātsadas somanetrā:

rakṣoḥaṇas te naṣ pāntu tebhyo namas tebhyas svāhā | ye
devā antarikṣāssado :
vṛhaspatinnetrā rakṣoḥaṇas te naṣ pāntu te no vantu tebhyo
namas tebhyas svāhā | | :

z 2 z

In 1 read 'gninetrā in 2 dakṣiṇātsado, in 5 antarikṣātsado
vṛhaspatinetrā and 'vantu; it seems probable that the phrase
te no 'vantu should be read in each formula as it occurs in
each one in MS.

54. [f. 41 a, l. 7.]

KS. 15. 2; MS. 2. 6. 3.

agnaye purassade rakṣoghna svāhā | yamāya dakṣiṇātsa :
de rakṣoghne svāhā | marudbhyaṣ paçcātsadbhyo rakṣohā-
bhyas svāhā | somāya :
uttarāsade rakṣoghne svāhā | avaspate divaspate rakṣoghne
svāhā | | :
vṛhaspataye antarikṣasade rakṣoghne svāhā z 3 z

In 1 read rakṣoghne, in 3 rakṣohabhyas, in 4 somāyottarātsade;
a possible reading in 5 is avaspataye divassade; in 6 read
antarikṣātsade.

55. [f. 41 a, l. 10.]

divo jāto diva :
s putro asmāj jātaṁ sahat saha açvattham agre jāitrāyāt
sahadevaṁ dāma :
si | taṁ tvām ā yathā ratham upa tiṣṭhantu rājānas suma-
tibhyo vi vabhuvē | :
tvayā vayaṁ devajātas sarvāṣ prā çocayāmasi | uta satyā
utānṛ :
taḥ yo açvatthēna mittreṇa sumatīr iva gacchati jayaç ca
sarva :
ṣ pṛtanā yāç ca satyā utānṛtaḥ adharāṇco ni druvantu
sumatyā :

ululākṛta | açvattha mittraṁ puruṣaṁ ye vātā pṛdanyā z 4 z :

The following seems a possible reading: divo jāto divas
putro asmāj jātaṁ sahat sahaḥ | açvattho agre jāitrāyāt saha-
devaṁ dāmāsi z 1 z taṁ tvām ā yathā rathaṁ upa tiṣṭhantu
rājānaḥ | samṛtibhyo vāi vibhuvē z 2 z tvayā vayaṁ devajāta
sārvāṣ pra çocayāmasi | uta satyā utānṛtaḥ z 3 z yo açvatthēna

mitreṇa samṛtir iva gacchati | jayac ca sarvāṣ pṛtanā yāc ca
satyā utānṛtāḥ z 4 z adharāṇco ni dravantu samṛtyā ulu-
lākṛtāḥ | aṣvattha mitraṁ puruṣaṁ ye vātāṣ pṛtanyanti z 5
z 4 z

The emendations are rather bold but in keeping with the
evident intent of the charm: cf. C. 3. 6.

56. [f. 41 b, l. 1.]

Cf. TS. 5. 5. 10. 3 and 4; C. 3. 26 and 27.

ugrā nāma stha teṣāṁ vaṣ puro grahāḥ prācī dik teṣāṁ vo
agnir iṣavaḥ:
te no mṛḍāta dvipade catuṣpade teṣāṁ vo yāny āyudhāni
vā iṣavas tebhyo:
namas tebhyas svāhā z kravṛyā nāma stha teṣāṁ vo dakṣiṇād
grhā dakṣiṇā di:
k teṣāṁ va āpa iṣavaḥ virājo nāma stha teṣāṁ vaḥ paṇḍad
grhā prācī:
dik teṣāṁ vaṣ kāsa iṣavaḥ avasthā nāma stha teṣāṁ vā
uttarād grhā udī:
cī dik teṣāṁ vo vāta iṣavaḥ uttare nāma stha teṣāṁ va
upari grhā:
ūrdhvā dik teṣāṁ vo varṣam iṣavaḥ te no mṛḍata dvipade
catuṣpade te:
ṣāṁ vo yāny āyudhāni yā iṣavas tebhyo namas tebhyas
svāhā z 5 z:

z anu 11 z

Read: ugrā nāma stha teṣāṁ vaṣ puro grahāḥ prācī dik teṣāṁ
vo agnir iṣavaḥ | te no mṛḍata dvipade catuṣpade teṣāṁ vo
yāny āyudhāni yā iṣavas tebhyo namas tebhyas svāhā z 1 z
kravṛyā nāma stha teṣāṁ vo dakṣiṇād grhā dakṣiṇā dik teṣāṁ
va āpa iṣavaḥ | te no . . . z 2 z virājo nāma stha teṣāṁ vaḥ
paṇḍad grhāṣ prācī dik teṣāṁ vaṣ kāsa iṣavaḥ | te no . . .
z 3 z avasthā nāma stha teṣāṁ va uttarād grhā udīcī dik teṣāṁ
vo vāta iṣavaḥ | te no . . . z 4 z uttare nāma stha teṣāṁ va
upari grhā ūrdhvā dik teṣāṁ vo varṣam iṣavaḥ | te no mṛḍata
dvipade catuṣpade teṣāṁ vo yāny āyudhāni yā iṣavas tebhyo
namas tebhyas svāhā z 5 z 5 z anu 11 z

57. [f. 41 b, l. 9.]

yadīdāṁ divo yady avājagāma yady antarikṣād ya:
di pārthivoyaḥ yadi yajño yajñapate sargas tebhyaḥ sarvebhyo
manasā:

vidhema |

Read ava jagāma in a. perhaps prthivyaḥ at end of b;
yajñapates in c. and manasā in d.

yam indram āhur yaṁ mitram āhu yama somam

āhuḥ yam agnim ā:

hur yam āhus tebhyaḥ sarvebhyo namasā vidhema |

Read āhur at end of a. yaṁ somam āhur yam agnim āhuḥ
for b; for c we might read yaṁ varuṇaṁ vṛhaspatim āhus.

yad indriyā jalpyāḥ:

prordhnavanti svapunaṁ durbhūtam abhi ye śinanti | ye

devānām ṛtvijo:

yajñiyānām tebhyaḥ sarvebhyo namasā vidhema |

For a yad indriyā jalpyā prārdhnavanti would seem possible;
in b read svapunaṁ.

ye cṣaṣānā nanama:

sā ni yanti sūryasya raçmīr anu saṁ caranti | ye devānām

dharmadhṛto babhū:

vus tebhyaḥ sarvebhyo namasā vidhema |

In a read cṣaṣānā namasā, in b raçmīr.

svarbhisīyer abhi ye bhāyanti yebhyaḥ:

[f. 42 a] kṛṇvānti yo rodāyanti ye vā strīṇām pratirūpā babhū-

vus tebhyaḥ sarvebhyo namasā:

vidhema z 1 z

Read: sūriṣu ye rabhanti ye bhānti | ye bhyāḥ kṛṇvanti |
ye rodāyanti | ye vā strīṇām pratirūpā babhūvus tebhyaḥ sar-
vebhyo namasā vidhema z 5 z 1 z

The reading suggested for pāda a is of course only a bare
possibility. Several of the pādas of this hymn occur elsewhere
also but in dissimilar context.

58. [f. 42 a, l. 2.]

vyāvṛttāu payāu gāvāu viçvāu vijñātata vidveṣaṇaṁ kilāsi:
tayatāināu vy ata dviṣaḥ vi kilināv ata dviṣat vāsatiḥbhyas
samābhyaḥ atho:

lmukam iva khādiram agnir vām astv antarā sinhas te
 cakṣuṣo vyāghraḥ pari:
 ṣum jane agnir vastv anterā yathā vām naçāsati vi dyāur
 vy ata tad vayās tata ka:
 paṭyavaḥ vyā oṣadhe praraspasy agnir iva tam dahah |
 vyavāyyamtu hrdayāni vi ci:
 ttāni manānsi ca atho ya tanno saṅgataṁ tad vām astu
 vidhulakam | asti vāiṣām:
 vidviṣam ubhāu sannetarā viçvañcāu pary ā vartayetām
 yathā vām naçāsati:

z 2 z

The transliteration praraspasy in line 5 is not certain.

It seems pretty clear that six stanzas are intended here, the first to end vy ata dviṣaḥ but out of it I get nothing. Pāda a of st. 2 I cannot reconstruct out of vi kilnāv ata dviṣat but for bed it seems possible to read vāsantibhyas samābhyaḥ | atholmukam iva khādiram agnir vām astv antarah. The second hemistich of st. 3 is probably to be read agnir vām astv antaro yathā vām naço asati. St. 4d is clear as it stands agnir iva tam dahah and for pāda a vi dyāur vy ety tad vayas seems possible. For st. 5 we may read vy ava yantu hrdayāni vi cittāni manānsi ca | atho yat tanvo saṅgataṁ tad vām astu vidhulakam: it seems possible to connect vidhulakam with vidhura. Though not wholly satisfactory we may read for st. 6cd viṣvañcāu pary ā vartayetām yathā vām naço asati; and the words ubhāu sannetarā seem good in pāda b.

Other than the above I am unable to suggest anything; it is fairly clear that this is a charm to drive away a disease or demon, perhaps one afflicting cattle.

59. [f. 42a, l. 9.]

Ç. 5. 28. 3—11. 1. 12.

trayaṣ poṣa trivṛtaḥ çrayantās anaktu pūṣā payasā ghr̥tena | :
 anyasya bhāumā puruṣa bhāumā bhūmā paçūnām dahi
 çrayantām z

In a read poṣās and çrayantām, for c annasya bhūmā puruṣasya bhūmā, and in d ta iha çrayantām.

imam ā:

dityā vasunā sam akṣatesam agne vardhayāmāvṛdhānaḥ
 yasmim̐ ttrivṛç chetām:
 pūṣayiṣnur imam indra sam srjā vīryeṇa |

Read in ab ukṣatemam, in b vardhaya vāyrdhānah; in c trivṛe chrayatām poṣayīṣṇur.

bhūmiṣ tvā pātu haritena viçva:
bhir agniḥ pipartu payasā majāiṣā vīrudbhis te arjuno saṁ-
vidānam va:

rco dadhātu sumanasyamānam

In a read viçvabhṛd, in b sajoṣāḥ; in c arjunam, *mānam at end of d.

dvedhā jātām janmanedaṁ hiraṇyam agner ekaṁ:
priyatām babhūvaḥ somasyāikām hiṁsitasya parāpatad apām
ekaṁ ve:

daso retāhus tat te hiraṇyam trivṛtāstv āyuse

In a read tredhā and hiraṇyam, in b priyatamam babhūva, in c somasyāikam and parāpatat (before colon); in d vedhaso reta āhus, in e trivṛd astv.

triyāyuṣam jamadagneṣ ka:
çyapasya triyāyuṣam tredhāmṛtasya cakṣaṇam trīny āyūṁṣi
nas kṛdhi |

In b read triyāyuṣam, in d naṣ.

tra:

yas s*parṇās travitāyam ekākṣaram abhisambhūya çakrā
praty ūha mṛ:

* * * * * na viçvā z divas tvā pātu haritaṁ ma:

In a read suparṇās trivṛtā yad āyann, in b çakrāḥ; for the second hemistich praty āuhan mṛtyum amṛtena sākam antar dadhānā duritāni viçvā.

Inasmuch as f. 42 b is badly defaced I give now all that is legible on it.

* na viçvā z divas tvā pātu haritaṁ ma
* ya pātu pra harād devapurāyam imāsti
* taḥ tāns tvaṁ bibhratāyuṣmān varcasvān utta
* amṛtaṁ hiraṇyam yābhedeḥ prathamō devo a
* ṇomy anu manyatām trivṛtā vadhena | nava prā
* īr * āyutvāya çataçāradāya harite trī
* ṇ * rajasāviṣṭitāni | a ta tritattva
* harjātassa yan nāma tena te ci çṛ
* z 3 z yajñentam tapasā vṛ
* y * niḥ upah * tāgne jarasaṣ parastā
* pati gṛhṇāti vidvān vṛ
* s * ād a

Drawing on Ç. to fill the lacunae we may read the remaining stanzas as follows: divas tvā pātu haritām madhyāt tvā pātṛ arjunam | bhūmyā ayasmayām pātu prāharad devapurā ayam z 7 z imās tisro devapurās tās tvā rakṣantu sarvataḥ | tās tvām bibhrad ayusmān varcasvān uttaro dviṣitām bhava z 8 z purām devānām amṛtām hiraṇyām ya ābedhe prathamō devo agre | tasmāi namo daṣa prāciḥ kṛṇomy anu manyatām trivṛd ābadhe me z 9 z nava prāṇān navabhis saṁ mimite dirghāyutvāya ṣaṭaṣṭradāya | harite trīṇi rajate trīṇy ayasi trīṇi rajasāviṣṭitāni z 10 z ā tvā cṛtatv aryamā pūṣā vṛhaspatiḥ | aharjātasya yaṁ nāma tena te 'ti cṛtāmasi z 11 z 3 z

60.

Ç. 6. 122. 4 and 1.

The visible fragments of the last four lines of f. 42b (given above) are clearly parts of Ç. 6. 122; Whitney reports st. 2 and 3 as being in Pāipp. 16. Drawing from Ç. we may get the following possible reconstruction: yajñām yantām tapasā vṛhantam anv ā robāmi manasā sayoniḥ | upahūtā agne jarasaḥ parastāt tṛtiye nāke sadhamādām madema z 1 z tam prajānan prati grhṇāti vidvān vṛhaspatiḥ prathamajā ṛtasya | asmābhir dattām jarasaḥ parastād acchinām tantum anu saṁ tarema z 2 z * * * * *

61. [f. 43a, l. 1.]

* * * * *

ne | paṣpāri viṣvā bhuvanāni g^{*}pā antarikṣasya * * * vi * * *
nā bilam te ghṛtaṣcutam nadinām pathe suṣrutam juhomi |

pravidvān * *

mumugdhi pāṣānyasya pattri vidhavā yathāsat. | anātureṇa

varuṇ^{*} * *

the no svastibhir ati durgāṇi veṣyat. | tam aṣvinā pratigṛhyā
svast^{*}

doṣavena pūṣa se saṁ pra yacchāt. z 5 z anuvākam 12 zz

Read: * | paṣpāra viṣvā bhuvanāni gopā antarikṣasya mahato vimānaḥ z z * * nā bilam te ghṛtaṣcutam nadinām patye suṣrutam juhomi | pravidvān * * mumugdhi †pāṣ anyasya patnī vidhavā yathāsat z z anātureṇa varuṇ^{*} * the no svastibhir ati durgāṇi vikṣat | tam aṣvinā pratigṛhyā svastaye †doṣavena pūṣā me saṁ pra yacchāt z z 5 z anuvākam 12 z

Of course it is impossible to know how many stanzas preceded these, but it seems probable to me that the hymn originally contained five; for six, or possibly seven, lines stood after the last line visible on f. 42 b and probably not more than two lines are broken from the top of f. 43: about that amount of space would be required for the last three stanzas of no. 60 (if it had five) and the first two and a half of no. 61.

62. [f. 43 a, l. 5.]

ye piç *

cā imām vidyam ākūtim mohayantu naḥ teṣām tvam agne
nāçaya varca *
ttam atho prajām nāçayāgne piçācānam varçaç cittam atho
prajānām yath *
çām mahyam dhārayathāham kāmayantu me | āçām myaham
rādhātvi indriyeṇa
* * tām tvam agne kravyādas sarvān piçācān arcīṣā daha
prati dah *
* * dānān sūra devān vicarṣaṇa yo no durasyād veṣaṇa
yathāçām
* * naḥ enaṣ paçugmitsanty āçāyām puruṣeṣu ca | tāns
tvam sahasra
* * * pi * * i * ṣā * * ha z * z * * * * *

Read: ye piçācā imām vidyām ākūtim mohayanti naḥ | teṣām
tvam agne nāçaya varçaç cittam atho prajām z 1 z nāçayāgne
piçācānām varçaç cittam atho prajām | yathāçām mahyam
dhāraya yathā ha kāmayantu me z 2 z āçām mahyam rādha-
yātvi indriyeṇa * * * tām | tvam agne kravyādas sarvān piçācān
arcīṣā daha z 3 z prati daha yatudhānām sūra devān vicar-
ṣaṇin | yo no durasyād veṣaṇām yathāçām * * * naḥ z 4 z
ye naṣ paçūn agna icchanty āçāyām puruṣeṣu ca | tāns tvam
sahasracakṣaṣaṣ piçācān arcīṣā daha z 5 z 1 z

64. [f. 43 b, l. 1.]

* * * * *

mi rekṣatim devānām sarveṣām sajātānā * d * v * nirṛtir h * * :
* açyapasya pratisaro dyāuṣ pitā pṛthivī mātā yathābhi
cakru devā :
s tathābhi kṛṇutā punaḥ yāṣ kṛtyā nīlavatī yāṣ kṛtyāṣ
paçyāvatiḥ :

kṛtyā yāç cakrun lohinīs tā ito nāçayāmasi | yadivā yad i :
mā jāhur ime bhadṛāsi sunvati | kṛtyāsi kalyāṇy asi sāmum
kartā :

rasvaṁ jahi z 3 z.

Beginning with the second line visible on this page we have the last three stanzas of the third hymn in anuvāka 13; the first one of these is very near Ç. 3. 9. 1. The following gives some emendations which seem possible: kaçyapasya pratisaro dyāus pitā pṛthivi mātā | yathābhi cakra devās tathābhi kṛṇutā punaḥ z z yās kṛtyā nīlavatīr yās kṛtyās peçyavatīḥ | kṛtyā yāç cakrur lohinīs tā ito nāçayāmasi z z † yadivā yad imā jāhur ime † bhadṛāsi sunvati | kṛtyāsi kalyāṇy asi sāmum kartāmyaṁ jahi z z 3 z

The first stanza varies decidedly from Ç in pāda a, where Ç has karçaphasya viçaphasya. The form peçyavant is not in the lexicon, but it seems a possible formation from piç. For pāda a of the last stanza we might read yad devā yad imāç cāhur; aramyam in pāda d is not satisfactory. The general sphere of the hymn seems to be indicated in the second stanza.

65. [f. 43 b, l. 6.]

vṛhat te varçaḥ pṛthatām apa dyām mittrebhy eti :
sudubhis suvarçaḥ ṛte rājā varuṇo vṛavītu tasmāt tvam
haviṣā bhāga :

dāma z çatām heman tān daçayā sapattrān viças tvā sarvān
guṇguvo bhava :

ntu z ya stotipānām praty ut pātayas tvā sujāto vilahā
tvam n*ica z :

indras tvam yoktre adhime vinakty asmāi yas tvā yacchan-
dam pratyum si* * :

sbhā jigīṣām pṛtanas saparye vṛhas tam avajāṅghanī* * * :

* rāsyā te balīm soma srjātān upa sam* * * :

* * * * *

[f. 44 a.] ro abhya prayuṅga damayā sapatnān. | ṛte rājā
varuṇo vṛavītu tasmāt tvam :

haviṣā bhāgadāsa z çatām heman tān damayā sapatnān
viças tvā sarvā :

n guṇguvo bhavantu z 4 z

The number of lines lost from f. 43 cannot be ascertained, but it is probable that this hymn contained not less than six stanzas. In the last stanza it may be possible to read in b

bhāgadhā asaḥ, in c hemān tām damaya, in d viṣas tvās sarvā guṇḡavo. In the first stanza in pāda a it seems possible to read prathatām abhi, in b mitro bhya and suvarcāḥ (but I see nothing for sudubhis), and the next two pādas as in the final stanza. Further than these I cannot make suggestions: this seems to be a charm for the increase of a king's glory and dominion.

66. [f. 44 a, l. 3.]

bhagāya rājñe prathamam juhomi viṣve devā :
uttare mādayantām z uçam patnībhya uṇatībhya ābhyah
patim agni ā vaha :

rātahavyā |

In b read mādayantām followed by colon; in d agna and rātahavya.

patim vṛṇiṣva haviṣā grṇānas tam ā vahat savita tam te a :
gniḥ tam imdra masmi ṇataṇaradāya bhagabhaktā bhaga-
vatī suvīrāḥ | :

In a grṇānā is probably the better reading, in b savitā: in c we seem to have indra but masmi I cannot solve; in d read suvīrā.

yam arṣā sam patim asye dideṣita janed icchantam tam iyā
vahāsi | :

sumaṅgaly apatighnī suṣevā rāyas poṣeṇa uciṣā sutasva

In a we may read aṣyāi dideṣitha, but for arṣā I have nothing; in b it seems clear that we must read tam ihā vahāsi and icchantam fits the connection very well, but jane dhitsantam is a possibility, I think. In d we may read sam iṣā srjasva.

yat te pa :
tim aryamā jāyamānām yām dhātā ca kalpajam ihā vahāsi | a :
bhi vareṇa haviṣā juhomi | prajām nāitu sumanasyamānām

In a read jāyamānām, in b yam and kalpajam; in d nayatu.

patim te dyā :
vāprthivī a dhātām patim mittrāvaruṇā vāto gniḥ saptar-
ṣayo di :

tis soma indras te tvā devāṣ pativatnī kṛṇvantu z 5 z anu

13 zz :

Read: patim te dyāvaprthivi ā dhatām mitrāvaruṇā vāto
 'gniḥ | saptarṣayo 'ditis soma indras te tvā devāḥ pativatim
 kṛṇvantu z 5 z 5 z anu 13 z

67. [f. 44 a, l. 13.]

yaç tvārāya pra viveça jānur jānivāt uta | atho tanvaṁ
 pasprça ta :

m ito nin nayāmasi.

The ms. is slightly cracked and the first of pāda a is not clear. In a read yas tvārāyaḥ, for b I have no suggestion: in c read pasparça, in d nir.

niṣ tvārāya nayāmasi | ya imān pra vive :
 çataḥ ātmānam asya mā hiṁsīr anyatra cara meha bhūḥ |

For b read ya imān pra viveçitha, with colon following: in c asyā.

yejarā :
 yemām upāyasi dhehasyāi rayipoṣaṇam. prajāṁ ca tasyā
 mā hiṁ :

sīr anyatra cara meha bhūḥ |

In a I think we must read yo 'rāyemām, in b dhehy asyāi rāyas °.

yejarāye viḥāyasi hanāmi vī :
 rudhā tvā | atho khanatramīs tvā varṣeṇa yathā bhagaṁ

For a we might read yo 'rāyemām vṛāyasi; for the second hemistich I have no suggestions.

yejarāyā :
 [f. 44 b.] sūryaṁ str̥ṣu yam āvato kyaṁ yat pāutr̥ṣadyaṁ
 dāurbhāgyaṁ tam ito ṇir nayāmasi z 1 :

For a we might read yo 'rāyas sūryaṁ str̥ṣu, but b seems hopeless and so leaves us uncertain about a: with pāutr̥ṣadyaṁ the second hemistich can stand. The stanza is number 5, the hymn number 1 (in anu 14).

68. [f. 44 b. l. 2.]

agner vo balavato balena manyu vya nayāmasi | indrasya
 vas somasya vaḥ vṛhaspa .

ter vaṣ prajāpater vo balavato balena manyur va nayāmasi |
 yat te sūryaṁ divi deve :

ṣu varcas tasya no dehi tamasi pracetām ahaṁ ca vigras
 tviṣitas tviṣīmān i :

mām vācam vi çākṣīya z 2 z

Read: agner vo balavato balena manyum ava nayāmasi |
 indrasya vo ° ° | somaśya vo ° ° | vṛhaspater vo ° ° | prajāpater
 vo balavato manyum ava nayāmasi | yat te sūrya divi deveṣu
 varcas taśya no dehi tamasi pracetasah z aham ca vigras
 tviṣitas tviṣimān imān vācam vi cakṣīya z 2 z

We might also read vi nayāmasi, and dhehi might be even
 better than dehi. If the formulae are to be numbered it seems
 that we must count six.

69. [f. 44 b, l. 5.]

vātaṣ purastāt pavamena bhasvān namas te :
 vidma te nāmadheyaṁ mā no hiṁsīḥ tapodaṣ puro dak-
 ṣiṇataḥ pavamena bhasvā :
 n namas te vidma te nāmadheyaṁ mā no hiṁsīḥ | viçvāyur
 viçvajanīnaṣ pratī :
 cyā diçaṣ pavamena bhasvān. namas te vidma te nāma-
 dheyaṁ mā no hiṁsīḥ z :
 çivo vāiçvadeva udīcyā diçaṣ pavamena bhasvān. namas
 te vidma te nāmadhe :
 yaṁ mā no hiṁsīḥ z atiṣṭhāvā bārhaspatya ūrdhvāyā diçaṣ
 pavamena bha :
 svān. namas te vidma te nāmadheyaṁ mā no hiṁsīḥ z 3 z
 iti ṣaḍṛta :

sūktam. z z

Read: vātaṣ purastāt †pavamena bhāsvān namas te vidma
 te nāmadheyaṁ mā no hiṁsīḥ z 1 z tapodāṣ puro dakṣiṇataḥ
 †pavamena ° ° z 2 z viçvāyur viçvajanīnaṣ praticyā diçaṣ
 †pavamena ° ° z 3 z çivo vāiçvadeva udīcyā diçaṣ †pavamena °
 ° z 4 z atiṣṭhāvā bārhaspatya ūrdhvāyā diçaṣ †pavamena
 bhāsvān namas te vidma te nāmadheyaṁ mā no hiṁsīḥ z 5 z
 3 z iti ṣaḍṛcasūktam z z

In the margin opposite this hymn is written ṣaḍṛtasūktam
 vātā purastāt. Probably pavamanena should stand for pava-
 mena.

70. [f. 44 b, l. 12.]

apa dyor apā utanaḍ apaskadya vadeḍ ahiṁ kalyāṇy āyatāḥ :
 smṛtaṁ sumanas santu vidyataḥ |

In a it seems possible to read apo dyor apa uttarād, in b
 apaskandya vadhed ahiṁ: in c I think we should have kalyāṇi,
 followed by āyatāḥ rather than āyatāḥ; smṛtaṁ is hardly

satisfactory and I have thought of ṛtañ, but no suggestions can be made with confidence; for d it seems as if we must read *sumanasas santu vidyutaḥ*.

yat parjas tayitnussa sañ sañ vyatate jagat. pa :
tantu dvitīyā trayāvatī pṛthivī prati modate |

The transliteration of pāda a is not certain owing to a crack in the ms. We may read for ab *yat parjanyaś tanayit-nus sañ sañ vyathate jagat*: in c *patanti* would seem better, and if a form of *dvitīya* is to stand it would probably be *dvitīyās*; *trayāvatī* cannot stand, I think, and *ṛṣyāvati* would be a pretty emendation though the change to twelve syllables for d is rather sudden; if *ṛṣyāvati* seems worth consideration I would be inclined to push conjecture a little further and read in c *udanvatir yās*. Cf. RV. 5. 83. 9.

eṣenābhy arkam dīvrkāḥve :
dhenurñ kām iva ahiñś tvañ vidyutāñ jahi māsmaḥ
puruṣāñ vadhīḥ |

Pāda b seems to end with *iva*, before which *gām* is probable though *dhenukām* is possible; one may suspect that the syllables *rkāḥve* are a corruption of *ṛṣabho* or else of a verb-form from the root *arc*, while the letters *dīvr* could lead us in several directions: I think the import of the hemistich is 'the thunders roar lustily.' For cd we may read *ahiñś tvañ vidyutāñ jahi māsmaḥ puruṣāñ vadhīḥ*.

abhikra :
ndāḥ stanayitnor avasphūrjad açanyā uta | devā maruto
mṛdata naḥ pātu no :

duritād avadyāt.

Read *abhikrandaḥ* in a and *avāsphūrjad* in b; the hemistich in this form is slightly asymmetrical but it results from the simplest emendation: in c read *mṛdata* (the ms. so corrects), in d *pātu*.

vīcite pari ṇo nama ādityaḥ carma yacchata | yūyata :
parṇiṇo çaram utāparṇo ṛṣādaça z 4 z

Read: *vṛjite pari ṇo nama ādityaḥ çarma yacchata | yuyota parṇiṇaṁ çaram utāparṇaṁ ṛṣādaṣaḥ z 5 z 4 z*.

The first pāda is a variant of Ç. 1. 2. 2a.

71. [f. 44b, l. 18.]

Cf. Ç. 5. 14.

kṛtavvyadhana vidva taṁ yaç ca :
 kāra taṁ ij jahi da tvāṁ icakliṣe vyaṁ vadhāya çāṁ sasī-
 mahe yathā :
 [f. 45 a] tvā devy oṣadham prātīcīnaṁ phalaṁ kṛtaṁ evā tvāṁ
 kṛtyane kṛtaṁ hastigrīha parā :
 yanaḥ punaḥ kṛtyāṁ kṛtyākṛte prātīcīnaṁ phalaṁ kṛtaṁ.
 evā tvāṁ kṛtyane kṛ :
 taṁ hastigrī parā nayaḥ punaḥ kṛtyā kṛtām kṛtī go dhenukā
 vaṭuṁ muṁ nayaṭ. | :
 çaktur vyaçaktupeçyaṁ prātīcīṣ prati tad vasat. yān te
 cakrur vantaneṣu va :
 ntā kūkhur vratāsu ca maṇḍūke kṛtyāṁ yāṁ cakrus tayā
 kṛtyākṛto jahi :
 agnir vāituṣ pratikūlām anukūlam ivodakam çuke rathāi-
 vartatām kṛtyekṛtyā :

kṛtamtāḥ z 5 z anu 14 z

It will be noted that the ms. writes the four pādas begin-
 ning prātīcīnaṁ phalaṁ twice; evidently a dittography. Stanzas
 1 and 5 here are 9 and 13 of Ç. 5. 14, and Ç. 5. 14. 4ab also
 appears; with st. 4 cf. Ç. 4. 17. 4.

Read: kṛtavvyadhani vidhya taṁ yaç cakāra taṁ ij jahi na
 tvāṁ acakruṣe vyaṁ vadhāya saṁ çīçimahi z 1 z yathā tvāṁ
 devy oṣadhīnāṁ prātīcīnaphalaṁ kṛtaṁ evā tvāṁ kṛtyena kṛtaṁ
 hastagrīha parā nayaḥ z 2 z punaḥ kṛtyāṁ kṛtyākṛte gāur dhe-
 nukā †vaṭuṁ muṁ† nayaṭ | †çaktur vyaçaktupeçyaṁ† prātīcīṣ
 prati tad vasat z 3 z yāṁ te cakrur vantaneṣu †vantā kūkhur
 vratāsu ca† | maṇḍūke kṛtyāṁ yāṁ cakrus tayā kṛtyākṛto jahi
 z 4 z agnir ivāitu pratikūlam anukūlam ivodakam | sukho ratha
 iva vartatām kṛtyā kṛtyākṛtaṁ punaḥ z 5 z 5 z anu 14 z

In st. 2b the neuter is difficult but not impossible, I think.
 In st. 3b vatsaṁ nayaṭ would be a good reading; and in 3d
 perhaps prātīcī would be better.

72. [f. 45 a, l. 7.]

agnir dyumnena sūryo jyotiṣā dyāur mahi :
 mnā antarikṣa vyacasā diçāçābhiṣ pṛthivī payobhir idaṁ
 rāṣṭraṁ vardhaya :
 ntu prajāvat. |

Read antarikṣam, diṣa ācābhiḥ and payobhiḥ, punctuating after each pair of words down to idam.

tvāṣṭā rūpeṇa savitā savena ahar mittreṇa varuṇena rātrī :
pūṣā puṣṭir bhagaṁsena bhagaday idam rāṣṭram vardhay-
antu prajāvat.

Read mitreṇa, puṣṭibhiḥ, and possibly bhāgadheyena bhā-
gadhā.

yāni vi :
çvakarmāṇi jaghāna medimantarā dyākāpṛthivī ubhe | ta-
syāhuḥ kṣa :

ttriyam garbham pari mā vapathā mūrdhani cārayasva

We may feel certain in reading dyāvāpṛthivī, kṣatriyam and
dhārayasva; viçvakarmā ni would seem a better reading: it is
probable that antarā stands before dyāvā°, and sedima is
possible palaeographically, giving sedimantarā.

çchandānsy ābhito mayūkhāsto :
mā tumā ya jarasyāḥ purīṣam tasyāhuḥ kṣattriyam nirmitam
pari mā va :
patthā mūrdhani dhārayasva |

We might read: chandānsy ābhito mayūkhās stomān †tumā
ye jarasyāḥ | purīṣam tasyāhuḥ kṣatriyam nirmitam ° ° z 4 z

parāṇi tasya vratathā yāpi mahati madaspa :
dam kṛṇuṣva durdharāya vā mā tvā dabham sapatrā dip-
satus tava rāṣṭra :

m uttamam dyumnam astu z 1 z

Read: parāṇi tasya †vratathā yābhi saḥate sadaspadam
kṛṇuṣva durdharāya vā | mā tvā dabhan sapatnā dipsatas tava
rāṣṭram uttamam dyumnam astu z 5 z 1 z

73. [f. 45a, l. 16.]

idam tam mittrāvaruṇā havir vām yenāgre :
devā amṛtatvam āyan. | yenāsmāi kṣattram adhi dhārayojo
sapatrāṣ pra :

diṣas santv asmāi |

Read tan mitrā° in a, kṣattram in c. and dhārayājuḥ 'sap-
atnāṣ in cd.

ghṛtasya dhārā mittrāvaruṇā duha vām dhenur anupa :
 [f. 45 b] sphurantī deva savitota vāyur agnir bhūtasya patir iha
 çarma yacchāt. |

Read mitrā° in a, duhe in b; devas in c.

çam nas tam :
 mittrāvaruṇā gr̥ṇītām tredhā mitrā bahudhā vaçerām jayate
 seno apa gho :

şa etat pṛthak satvāno bahudhā bhavantām

In a read tan mitrā°, in b vaçeran; in c read eti, and if
 seno (= senā) does not seem acceptable we will have to read
 senāpa or jayante senā.

hanāma mittrāvaruṇā samitrām bha :
 vāsa bhadre sukṛtasya loke pārayān nas savitā devo agnir,
 jayāmedam ha :

viṣā kaçyapasya |

In a it almost seems that we must read amitrān; in b read
 bhavāma, in c parāyan.

vāto yaṁ mittrāvaruṇā tad āha haviṣy antaram
 nirmitam ka :
 çyapasya adhvaryavo marutā yasyāsan tena devebhyo varu-
 ṇāni cakruḥ :
 om̐ tena devebhyo varimāṇi cakruḥ z 2 z

Read: vāto yan mittrāvaruṇā tad aha haviṣy antaram nir-
 mitam kaçyapasya | adhvaryavo maruto yasyāsan tena devebhyo
 varimāṇi cakruḥ z 5 z 2 z

74. [f. 45 b, l. 7.]

Ç. 3. 3.

asikrat svapā iha bhava :
 d agne dambha rodasī urūcī | amuṁ naya namamā rāta-
 havyo yuñjanti supraja :

sam pañca janāḥ |

For this stanza cf. RV. 6. 11. 4 and MS. 4. 14. 15. Read in
 a acikradat, in b dambhaya where Ç. has vyacasva; in c namasā
 rātahavyam.

dūre diçchantam arçāsa indram ā çyāvayantu
 sakhyāya ri :
 puṁ yadi gāyatriyam vṛhatīm arkam asmāi sāutrāmaṇyā
 dadṛçantu devāḥ | :

In a read cit santam aruṣāsa. in b cyāva° and vipram; in c yad gāyatrīm, and in d dadhrṣanti.

adbhyas tvā rājā varuṇo juhāva somas tvāyaṁ hvayati par-
vatebhyaḥ indras tvā:

yaṁ hvayati vidbhyābhyaḥ cyeno bhūtvā viṣā patemaç

In c read vidbhya ābhyaç, and in d viça ā patemāḥ.

cyeno havin nayatv ā para:
smād anyakṣettre aparusyaṁ carantaṁ açvināṁ panthām
kr̥ṇutām sajan te garbhaṁ:

sajātā abhi saṁ saṁ viçadhvaṁ

In a read havir, in b anyaksetre aparuddham carantam; in c açvinā and sugam. in d abhi saṁviçadhvam.

cyeno haviṣ kaçyapasyopa çikṣe indraṁ vātaḥ pra:
hito dūtā vā viṣi ya catrun. | senāgrāi viṣo vṛṣaṇāno adharā
kāsī:

Reading çikṣaty we can get a good pāda a; and for pāda d we might consider as a possibility viço vṛṣan ā no adharāṇ carāsi: the form viṣi is probably for viçi, and senāgrāi for senāgre, but for the rest I have nothing.

yas te havaṁ prati niṣṭyāt sajātā uta niṣṭyā z 2 z apāta
indra tām:

mītvāyatheham ava gāyaḥ

Read: yas te havaṁ prati tiṣṭhat sajātā uta niṣṭyaḥ | apān-
cam indra tam mītvāthemam ava gamaya z 6 z

hvantanti tvā pañca janyāḥ pati mitrāvarṣa:
ta indrāgnī viçe devā viçi kṣemam adhīdharaṁ z 3 z

Read: hvayantu tvā pañca janāḥ prati mitrā avṛṣata indrāgnī
viçe devās te viçi kṣemam adīdharan z 7 z 3 z

75. [f. 45 b, l. 18.]

prajāpatir a:

nuvartis sa prajābhir anuvantiḥ sa mānuvarti anuvantiṁ
kr̥ṇotu | :

[f. 46 a] indro nuvantis sa vīryeṇanuvartis somo nuvantis sa
oṣadhībhir anuvantiḥ:

āpo nuvartayas tāṣ parjanyenānuvartayaḥ tā mānuvartayor
anuvantiṁ kr̥ṇo:

tu | devānuvartayas te mr̥tenānuvartayaḥ te mānuvartayor
anuvartiṁ kṛ :

ṇotu z 4 z

Read: prajāpatir anuvartis sa prajābhir anuvartiḥ | sa mānu-
vartir anuvartiṁ kṛṇotu z 1 z indro 'nuvartis sa vīryeṇānu-
vartiḥ | sa z 2 z somo 'nuvartis sa oṣadhibhir anuvartiḥ |
sa z 3 z āpo 'nuvartayas tāṣ parjanyaṇānuvartayaḥ |
te mānuvartayo anuvartiṁ kṛṇvantu z 4 z devā anuvartayas
te mr̥tenānuvartayaḥ | te mānuvartayo anuvartiṁ kṛṇvantu
z 5 z 4 z

76. [f. 46 a, l. 4.]

payo mahyam oṣadhayaṣ payo me vīrudho dadham |
apām payasvā :

d yat payas tenve varṣantu vṛṣṭayaḥ

In b read dadhan, in c payasvad and in d tad me.

payo mahyam parasvanto hastino me payo da-
dham | pa :

yaṣ patatṛiṇo mahyam vīṇayā me payo dadham |

In b read dadhan, also in d.

payasvāndre kṣettram astu paya :
svad ṛtu dhām | aham payasvān bhūyāsam gāvo mota
payasvatīḥ

For ab read payasvan me kṣetram astu payasvad uta me
dhāman; read ma uta in d.

payo mahyam a :
psarasam gandharvā me payo *dadham | payo me viçvā
bhūtāni vāto dadhātu me pa :

yaḥ

In a read apsaraso, in b dadhan.

payo mahyam dyāvāpṛthivī antarikṣam payo dadhat. | payo
me viçvā bhū :

tāni dhātā dadhātu me payaḥ

payas pṛthivyām paya oṣadhīṣu payo dhi :
vy antarikṣa payo dhaḥ payasvatīṣ pradiças santu ma-
hyam. z z :

z 5 z anu 15 z

Read: payaṣ prthivyaṁ paya oṣadhīṣu payo divy antarikṣe
dhāḥ | payasvatiṣ pradīṣas santu mahyam z 6 z 5 z anu 15 z
For the last stanza cf. VS. 18. 36; MS. 2. 12. 1, and others.
In the margin opposite st. 1 is written payaṣ prthivyaṁ °.

77. [f. 46a, l. 12.]

aham bibharmi te mano aham cittam aham vra :
vratam mamed apa kratāv aso mamāsaṣ ced asīdapi āmnā-
sāistrā samhi :
te ramatām mano mayi te ramatām manah āñjanasya
madhuṣasya kuṣṭhasya na :
latasya ca | vīrodikasya mūlena mukhena mardanam kṛtam
madhu me antar ā :
sya mukhena mandanam kṛtam. | tatro tvam vivartasva
narācī iva vartasi | :
yathā nemī rathacakram samantam pari śasvaje evā pari
śasva mā yathā :

[f. 46b] sam payite manah z 1 z

The sphere of this is clear, it is a love-charm; cf. Q. 6. 102 and the many others. The division of the pādas presented by the ms. into stanzas, and the details of emendation raise many difficulties which cannot be convincingly settled. The last stanza is perfectly clear and is equivalent to Q. 6. 8. 1: read śvajasva mām in c and payate in d. We may feel sure. I think, that the next to the last stanza begins madhu me; it seems possible to read for the first hemistich madhu mayi antar ā syan mukhena mardanam kṛtam: in pāda c, read tatra. and at the end of d perhaps vartāse, but for narācī I can suggest nothing unless we take an entirely different turn and read the hemistich tatra tvam vāi varcasvān araṇī iva vartasi.

Another stanza is as follows: āñjanasya maduḥhasya kuṣṭhasya naladasya ca | virudhas tasyā ° • kṛtam; but the emendation in pāda c is not very forceful. To start now with the first words, reading vratam in b and mamed aba in c we get three pādas of st. 1, and in view of Q. 1. 34. 2 I think we might read for d mama cittam ā sīdasi (Q. ° upāyasi). In the remaining part we find a whole pāda written twice, the correct form being mayi te ramatām manah (Q. 6. 102. 2d has veṣṭatām) which would be a good fifth pāda for st. 1 were it not for the intervening letters āmnāsāistrā and these seem beyond emendation.

78. [f. 46 b, l. 1.]

yathedam açvinā triṇaṁ vāto havatu bhūmyām e :
vā vayanṁ vahāmasi yāṁ vayanṁ kāmāyāmahe |

Read trīṇaṁ in a, vahati bhūmyām in b.

utvā mātā sthāpayatu pra :
tvā nudatām açvinā | dā çvaçur iva mātaram mām evājotu
te manaḥ

Read ut tvā in a, probably sū çvaçrūr in c and evārjotu in d.

yathā :
kṣīraṁ ca sarpiç ca manuṣyāṇāṁ hr̥ye priyam. | evāham
asyā nārīyā :

hr̥do bhūyāsam uttamaḥ

Read hr̥de in b, nārīyā in c.

agneṣ ṭvā tapas tapatu vātasya vr̥jī mā spr̥kṣa tā :
ni ṣadanāni mād̥hava ut tiṣṭha prehy agnivat te kṛṇomi

In b read dhr̥jir mā spr̥kṣat, in c sād̥hava.

sūryas tvā tapas tapa :
tu vātasya vr̥jī mā spr̥kṣa tāti ṣadanāni mād̥hava ut tiṣṭha
prehi sū :

ryavat te kṛṇomi z 2 z

Read: sūryas tvā tapas tapatu vātasya dhr̥jir mā spr̥kṣat |
tāni ṣadanāni sād̥hava ut tiṣṭha prehi sūryavat te kṛṇomi z 5
z 2 z

79. [f. 46 b, l. 8.]

hiranyapuṣpī subhagā rūpaç cāyam sumāṅgala :
tāv enām bhadrayā dattām amṛtāv amṛte bhage

Read sumāṅgalaḥ in b.

hiranyapiḍvaṁ haritaṁ tat te aṅge :
ṣu rohati tenemām açvinā nārī bhagenābhi ṣiṅcatām

In a read hiranyapiḍvaṁ, in c nārīṁ, in d siṅcatām.

yathā rūpasudhr̥ta :
s tr̥pyanto yanti kāmīnaḥ evā tvā sarve devarāḥ petayo
yamtu kāmīnaḥ :

In d read pretāro yantu.

hiranyākṣa madhuvarṇo hiranyaparicantane añkaṁ hiraṇya
yas tuva tenā:

syāiḥ patim ā vaha

Read: hiranyakṣo madhuvarṇo hiranyaparicchandanaḥ | aṅko
hiraṇyo yas tava tenāsyāi ° °.

yadi vāspa dirocanaṁ yadi vā nabhyas tira | yaṁ
tvā ma:

hyam oṣadhir aṅkena ma nyānaya z 3 z

This stanza appears Ç. 7. 38. 5, which has tirojanam in a;
this seems to me better than the tirocanaṁ of the commen-
tator. Read: yadi vāsi tirojanam yadi vā nadyas tiraḥ | iyaṁ
tvā mahyam oṣadhir aṅkena me nyānayat z 5 z 3 z

80. [f. 46 b, l. 14.]

punaḥ prāṇaṁ punar apānum a:
smāi punar vyānam uta soma dhehi | ātmānaṁ cakṣur udite
samānas tam anu pā:

hi tam anu jīva jāgavi |

Read apānam in a, adite in c and probably samānaṁ; in d
jīvaṁ jāgrhi: the omission of the second anu would improve
the metre.

tvāṣṭā rūpeṇa savitā savena ahar mitreṇa:
varuṇena rātrī indro jyeṣṭhena vrahmaṇāya vṛhaspatiḥ
pūṣāsmāi puna:

[f. 47 a] r asaṁ dadhātu

Read asuṁ in d; dadātu would be better too, in view of
st. 5d and RV. 10. 59. 7a punar no asuṁ pṛthivī dadātu.

yathādityā vasavo ye ca rudrā viçve devā aditir yā
ca rā:
trī yajño bhagas savitā ye ca | devā yamo smāi punar asaṁ
dadhātu |

Read 'smāi and asuṁ in d; the colon should follow rātrī.

somo rājā:
asucit te punar mā indro marudbhir aṇvinā te bhiṣaj yad
agnī rudro vasuvi:

t ta punar dāt.

The first pāda of this stanza seems to have been lost; for
pāda b I read somo rājā vasuvit te punar dāt: pāda c begins
with indro; read te in d.

punar dyāur devī punantarikṣam agnir vātaḥ pavamāno
bhiṣajya:

tu | grāhyāṣ pācām nirṛtyāṣ pācām mṛtyoḥ parçād vāk ca
devī punar da:

dātu z 4 z

Read: punar dyāur devī punar antarikṣam agnir vātaḥ pava-
māno bhiṣajyatu | grāhyāṣ pācām nirṛtyāṣ pācām mṛtyoḥ pācād
vāk ca devī punar dadātu z 5 z 4 z

81. [f. 47 a. l. 6.]

idaṁ cakṣur patāvarī mā hiṁsīt purāyusaḥ yad vām :
tamo yad u lapiṣam apa vācam ni dadhmasi |

Read ṛtāvarī in a, in b pura āyusaḥ might be better: at
the end of c I would read yat kilbiṣam, in d vācā (with
apavācam as an alternative).

idaṁ dhehy ada gaṇam yatho :
rmāti rohati | ayasmayas tarāṇkuṣo akṣāur aram sam apu
lāmpatu z

In a we may read adhiguṇam or adhi gaṇam, in b yathor-
myādhi or better yathormir adhi: in d upa limpato seems
probable, and the locative dual might stand at the beginning;
I would suggest then akṣyo rasam upa limpato.

yama :
hy ābhyam ujayam nṛcakṣā yaṁ çaṁsenaç çakta nir yaṁ
suparṇā ud āhuç cakṣu :

r uditer anantaṁ somo nṛcakṣā mayi tad darmaṁ dhātu |

The first two pādas do not connect well with either the
preceding or following, and it is possible that they were pādas
cd of a stanza whose first hemistich has fallen out: a possible
reading would be yamo hy ābhyām uj jayan nṛcakṣā yaṁ
çaṁsena. It seems possible to read nir ayan suparṇā with
some form of çakti at the beginning of the pāda; read uditeḥ
and insert colon; the last two words are probably dharmam
dadhātu.

yathā cakṣus suparṇa :
çca yathā çvaçrū yathā çunaḥ evā me açvinā cakṣuṣ kṛṇu-
taṁ puṣkara :

sraja |

Read suparṇasya in a, çvaçror in b; kṛṇutām puṣkarasrajā
for d: with this stanza cf. Q. 3. 22. 4.

yasyas suparnam prapataç cakṣuṣā cakṣur ā dadhe
tasyāha samu :

draje uva cakṣuṣā cakṣur ā dadhe z 5 z anu 16 z zz :

The second pāda looks as if pāda d had displaced a more appropriate pāda b; yet if we might read for a yas suparnasya prapātaç perhaps b could stand: in c we might read samudraṁ jetave. This is stanze 5 of hymn 5 in anu 16.

There are suggestions in the first two stanzas of healing some disease of the eye, in the last two the suggestions are rather of a charm for keenness of vision; of course both could stand in the same hymn.

82 and 83. [f. 47 a, l. 14.]

agnis te hāras siṣaktu yātudhāna svāhā vātam te prāṇas
siṣaktu :

sūryam te cakṣus siṣaktu antarikṣam te çrotram siṣaktu
paramām te parāvataṁ :

manas siṣaktu yātudhāna svāhā z 1 z apas te rasas siṣaktu :
yātudhāna svāhā | oṣadhīs te lomāni siṣajantu samudraṁ
de vā :

s siṣaktu yātudhāna svāhā z 2 z .

Read: agniṁ te hāras siṣaktu yātudhāna svāhā z 1 z vātam
te prāṇas siṣaktu ° z 2 z sūryam te cakṣus siṣaktu ° z 3 z
antarikṣam te çrotram siṣaktu ° z 4 z paramām te parāvataṁ
manas siṣaktu yātudhāna svāhā z 5 z 1 z

apas te rasas siṣaktu yātudhāna svāhā z 1 z oṣadhīs te
lomāni siṣajantu ° z 2 z samudraṁ te † vās siṣaktu yātu-
dhāna svāhā z 3 z 2 z

In 83. 3 vāk would seem a good reading.

The ms. so clearly separates these formulae into two groups that I have not felt it advisable to unite them in spite of their unity as regards content. Opposite 83 the margin has rakṣāmantram ha 4.

84. [f. 47 a, l. 18.]

idaṁ te çiro bhinadmi yā :
tudhāna svāhedam te mastiṣkam ni taraṇanaddi bhūmyām
te hano bhina :

[f. 47 b.] dmi yātudhāna svāhedam te jihvā ni te grīvā
bhinaddi yātudhāna svāhedam :

te skandhā ni idam te sāu bhinadmi yātudāna svāhedam
 te bāhū ni te hr̥ḍa :
 yaṁ bhinaddi yātudhāna svāhedam te pariśūr ṇi te ̣ronī
 bhinaddi yātudhā :
 na svāhedam te klomā ni te pr̥ṣṭhe bhinadmi yātudhāna
 svāhedam te vastā ni :
 idam ta ūrū bhinaddi yātudhāna svāhedam te jaṅghe
 bhinaddi yātudhāna svā :
 hedam te gulhāu bhinaddi yātudhāna svāhedam te pādāu
 ni te tvacam bhinaddi :
 yātudhāna svāhedam te prāṇam ni idam te parūṇṣi bhinaddi
 yātudhāna svā :
 hedam te majjo ni tarāṇenaddi bhūmyām z 3 z

Read: idam te ̣iro bhinadmi yātudhāna svāhā | idam te
 mastiṣkam ni tarhaṇena bhinadmi bhūmyām z 1 z idam te
 hanū °° | idam te jihvām ni °° °° z 2 z idam te grivām °° |
 idam te skandhān ni °° °° z 3 z idam te hastāu °° | idam te
 bāhū ni °° °° z 4 z idam te hr̥ḍayām °° | idam te paṛcūr
 (Wackernagel, *Altind. Gr.* § 51) ni °° °° z 5 z idam te ̣ronī
 °° | idam te kloma ni °° °° z 6 z idam te pr̥ṣṭhe °° | idam
 te 'vasthām ni °° °° z 7 z idam te ūrū °° | idam te jaṅghe
 ni °° °° z 8 z idam te gulhāu °° | idam te pādāu ni °° °°
 z 9 z idam te tvacam °° | idam te prāṇam ni °° °° z 10 z
 idam te parūṇṣi bhinadmi yātudhāna svāhā | idam te majja
 ni tarhaṇena bhinadmi bhūmyām z 11 z 3 z

85. [f. 47 b, l. 8.]

nandasodalam anta :
 kajiṣṇu hāparajitā amuṁ bhrūṇāny arpaya svayam pācān
 yāyati a :
 srar āitu sahakratur ātu mā prāṇo ātho balaṁ mano dadhātu
 bhadrayā agni :
 r viçvād vāsu mā svastaye dakṣiṇā mā dakṣiṇato dakṣiṇā
 pātu sa :
 vyataḥ paçcād anam vyadhāt pātu sarvasyā bhavahebhya
 çatam āpo divyā mittra :
 sya ca dakṣiṇaḥ | dhātā savitā rudras te no muñcantv
 anhasaḥ | çatam pāçā :
 tu varuṇasya vrahmanaspateç ça te māntan pāçām no viçya
 çatāt pāçe :
 bhyo vayantām z 4 z

This seems little more than words and phrases put together without connection, though there is in several places indication of prayer for protection; such as vyadhāt pātu, muñcantv añhasaḥ. It does not seem to be metrical.

At the very beginning I think nandasodaram is not improbable, then probably antakajiṣṇum and aparajitam, these being in agreement with amuñ; doubtless we should read bhrūnāny, but it seems hardly possible to construe two accusatives with arpayā. If asrar is a verb, as seems possible, we would want to read yāyaty asraḥ (followed by a period). Reading āitu mā prāno and bhadrayāgnir we would get a fairly good sense for āitu sahakratur . . . viṣvād vasuḥ (followed by period), though it would be quite possible to put the period after bhadrayā and then read vasur mā °; enani vyadhāt pātu would be the last words which can stand, but it seems that a full stop comes after bhavahebhya. Of course dhātā . . . añhasaḥ is good but of the rest I can make nothing though many of the words are obvious.

The above suggestions really offer no help in solving this hymn, for there is nothing in it that gives a solid base from which to work; at least I cannot see it.

86. [f. 47 b, l. 15.]

prācīm diṣam āsthām agnir māvāt v o jame ba :
 lāya diṣam priyo bhūyāsam anu mitvā me diṣo bhavantu
 ghṛtapratīkā :
 dakṣiṇām diṣam āsthām indro māvāt v o jase balāya pratī-
 cīm di :
 ṣam āsthām varuṇo māvāt v āujase balāya udīcīm diṣam
 āsthām :
 somo māvāt v āujase balāya dhruvam diṣam āsthām viṣṇur
 māvāt v āuja :
 [f. 48 a] se balāya ūrdhvām diṣam āsthām vṛhaspatir māvāt v
 āujase balāya :
 diṣam priya bhūyāsam anu mittrā me diṣo bhavantu ghṛta-
 pratīkā z :

z 5 z a 17 z

Read: prācīm diṣam āsthām agnir māvāt v o jase balāya |
 diṣam priyo bhūyāsam anu mitrā me diṣo bhavantu ghṛta-
 pratīkāḥ z 1 z dakṣiṇām diṣam āsthām indro māvāt v . . |

diçām ° ° ° z 2 z praciññ diçam āsthām varuṇo māvatv ° ° |
 diçām ° ° ° z 3 z udiññ diçam āsthām somo māvatv ° ° |
 diçām ° ° ° z 4 z dhruvām diçam āsthām viṣṇur māvatv ° ° |
 diçām ° ° ° y 5 z ūrdhvām diçam āsthām vṛhaspatir māvatv
 ojase balāya | diçām priyo bhūyāsam anu mitrā me diço
 bhavantu ghṛtapratikāḥ z 6 z 5 z anu 17 z

87. [f. 48 a, l. 3.]

Kāuṣ. 107.

manāyī tantu prathamam paçced anvyātanvata tam :
 nārī pra vravīmī va çādīr nā santurvarī sādurvyas tantur
 bhavati sādhu :

n oḍur ito vṛkaḥ atho horvarīr yūyam prāttar voḍheva
 dhāvajā kharga :

lā yurva paturīr apā agram ivāyanam | patantu pratvarīr
 ivorvarīḥ :

sādhunā pathā avacyu tāutubhyete tedeṇāçvatarāv iva |
 pra stomas u :

rvarīṇām khaṣayānām astvāviṣam | nārī pañcamāyoṣam
 sūtravat kṛ :

ṇutam vasu ariṣṭo sya vasthā priyamda vāsi tatāutira z 1 z :

Read: manāyī tantuñ prathamam paçyed anyā atanvata |
 tan nārīḥ pra vravīmī vas sādhuṛ vas santūrvarīḥ z 1 z sādhuṛ
 vas tantur bhavatu sādhuṛ otur etu vṛtaḥ | atho horvarīr yūyam
 prāttar voḍheva dhāvata z 2 z khargalā iva patvarīr apām
 ugram ivāyanam | patantu patvarīr ivorvarīḥ sādhunā pathā
 z 3 z avācyāu te totudyete todenāçvatarāv iva | pra stomam
 urvarīṇām çaṣayānām astāviṣam z 4 z nārī pañcamayūkham
 sūtravat kṛṇutam vasū | ariṣṭo 'sya vastā † priyamda vāsi
 tatāutira † z 5 z 1 z

The reading of 2b may not seem good but I regard it as
 probable; Bloomfield reports sādhuṛ otu as the reading of
 three mss. but reads in his text sādhuṛ etu ratho. In 2d Bl.
 reads voḍhave. In 5b Bl. reads kṛṇute vasu, though all but
 one of his mss. have kṛṇutam; in his note he suggests the
 reading here given. For priyamda in 5d we should probably
 read prendra as in Kāuṣ. but for the rest our reading seems
 as hopeless as that of Kāuṣika.

88. [f. 48a, l. 10.]

RV. 10. 152.

çāsa itthā mahan̄ asy āmittrakhāghāto adbhutaḥ na yasya
hanya :

te sakhā na jiyate kadā cana

In a read mahān, and in b amittrakhādo.

vrkṣo vi mavṛdho jahi vi vṛttrasya :
hanū ruja vi manyumanyu vṛttrahann amittrasyābhidāsati |

Read: vi rakṣo vi mṛdho jahi vi vṛtrasya hanū ruja | vi
manyum indra vṛtrahann amittrasyābhidāsataḥ z 2 z

vi nī :

ndra vi mṛdo jahi nīdā yatsva pradhanyataḥ adhamam
gamayā taso yo :

asmā abhi dāsati |

Read: vi na indra mṛdho jahi nīcā yaccha pṛtanyataḥ |
adhamam gamayā tamo yo asmān abhi dāsati z 3 z

svastidā viçām pati vṛttrahā :
vi mṛdo jahi vṛṣendraṣ pura etu nas somapā abhayañkaraḥ :

In a read patir, in b vṛtrahā and vi mṛdho or vimṛdho; jahi
does not fit in well here, and the reading of RV. is much
preferable * vimṛdho vaçī.

apendra dviṣato mano pa jijyāsato vadham vi mahaç çarma
yaccha va :

rīyo yavadhā vadham z 2 z

Read: apendra dviṣato mano pa jijyāsato vadham | vi mahac
çarma yaccha variyo yavayā vadham z 5 z 2 z

89. [f. 48a, l. 17.]

yo titaro maṇis tenāti taru :
ṣva saḥ sapattrān dviṣato maṇe pṛṇutasva pṛdanyataḥ |

In a read devo yo titaro; in b I think taruṣva dviṣaḥ is the
best of several possibilities: in c read sapatnān, and for d pra
nutasva pṛtanyataḥ.

pṛṇu :

[f. 48b] tasva pra dahasva sapattrān dviṣato maṇe tarāpi
mahataṁ duṣvasām varco bhañkti :

pradanyatām

In a read pra nutasva, in b sapatnān; in b ati or ava would be better and then mahatvam dviṣām is at least possible; in d read bhañdhi pr̥tanyatām.

varco jahī manyum jahy ākūtim dviṣatām maṇe | devo
yo ti:
taro maṇis tenāti tara dhūrvatā |
In c read 'titaro and in d dhūrvataḥ.

ye dhūrvanti ye druhyanti ye dviṣanti pra:
tanyataḥ | sarvān sapatrās te manir ṇa manyum dviṣatas
karat.

In b read pr̥tanyantaḥ; in cd sarvān sapatnānis te manir nir.
tava citte ta:
va vrate tavāivādhaspadam carām | devo yo nyataro maṇis
tenāti tara duṣvamā:

z 3 z

Read: tava citte tava vrate tavāivādhaspadam karam | devo
yo 'titaro maṇis tenāti taruṣva dviṣaḥ z 5 z 3 z

For 5d and 1b tenāti tara duṣṭarān might seem as good
as the reading given above.

90. [f. 48b, l. 6.]

Q. 6. 9.

ā te manaḥ cakṣuḥ ca ā mā te hṛdayam dade padoḥ
te padyam ā:
dade yathā tiṣṭhāsi me vaḥ vaḥ

In ab read manaḥ cakṣuḥ cā; in c pādoḥ, and in d vaḥ
only once. This stanza and the last one do not appear in C.,
nor elsewhere.

vānccha se pādāu tanvām vācchākṣūr vān:
ccha sakṣnyū akṣo vṛṣaṇyantyāṣ keṇā oṣṭhāu mām te kāmēna
āṣyatām

For a read vānccha me , for b vāncchākṣyāu vānccha sak-
thyāu; in c akṣyāu and in d ṣyatyām: the sign transliterated
ā in āṣyatām might be a poorly formed çu.

māi tvā:
dūṣanimṛgām ṇomi hṛdayaspr̥gam mamed apa kratāv aso
mamāsa:
ç ced asaḥ ced asīdapi

For the first hemistich I think we may read mayi tvā doṣaṇispr̥cam kṛṇomi hr̥dayaspr̥cam; in c read aha. and for d see hymn 77 where I suggested mama cittam ā sīdāsi.

yasām nābhīr ārohaṇām hr̥dī samvānanām kṛtām | :
gāvo ghṛtasya mātaro amu sam vānayanu me

In a read yāsām, in d amūm.

mahyam tvā dyāvāpr̥thi:
vī sahyam devī sarasvatī mahyam tvendraç cāgniç cāhoratre
ni yacchatām. z:

Read: mahyam tvā dyāvāpr̥thivī mahyam devī sarasvatī
mahyam tvendraç cāgniç cāhoratre ni yacchatām z 5 z 4 z

For st. 5 cf. above Nos. 9. 5 and 35. 5.

91. [f. 48b, l. 13.]

Cf. Ç. 2. 24.

bhūlir mūly arjunī punar vo yanti yādavaḥ punar jūtiṣ
kimīdinī:

yasya stha [dam atta yo va prahīt tam utta ma sāmsāny
attaḥ acchavo jigha:

cchavaḥ haviṣyavaḥ pāçyavaḥ sphātīhārī ramahārī vāta
jūte sa:

nojavah punar vo yanti yādavaḥ punar jūtiṣ kimīdinī yasya
stha da:

matta yo va prāhīt tam utta māmsāny attah z z om̐ tvam
utta smā:

māmsāny attah zz 5 z anuvā 18 z z iti atharva:

[f. 49a] ni pipalādaçākḥāyām dvitīyaḥ kāṇḍas samāptaḥ
z z

Ç. 2. 24 is a hymn of eight stanzas divided between male and female kimīdins; above in No. 42 we have a hymn, seemingly of five stanzas, devoted to the male kimīdins and here are the stanzas against the females. An arrangement in five stanzas may be made with some degree of reason, but to emend the words which are supposed to be names of the demons is not possible: feminine vocatives are called for, and I can only suggest as more or less plausible arjunī, jighatsavaḥ, sphātīhārī, ramahārī, manojavah. Taking up these suggestions we may read as follows: bhūlī mūly arjunī punar vo yantu yādavaḥ

punar jūtiṣ kimīdiniḥ | yasya stha tam atta yo vaḥ prāhāit tam
 atta svā māṁsāny atta z 1 z acchavo jighatsavaḥ punar ° ° °
 z 2 z haviṣyavaḥ pāçyavaḥ ° ° ° z 3 z sphātiḥāri ramahāri
 ° ° ° z 4 z vātajūte manojavāḥ punar vo yantu yātavaḥ punar
 jūtiṣ kimīdiniḥ | yasya stha tam atta yo vaḥ prāhāit tam atta
 svā māṁsāny atta z 5 z 5 z anu 18 z z ity atharvaṇi pāippa-
 lādaçākhāyam dvitiyaḥ kāṇḍas samāptaḥ z z

Notes on Village Government in Japan After 1600, I.—

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Introduction.

IN the year 1600, Tokugawa Ieyasu, through his victory at the battle of Sekigahara, became the virtual ruler of feudal Japan, and proceeded to elaborate that careful system of government which, with remarkably few changes, continued to exercise an undisputed sway over the nation till the middle of the nineteenth century. In this system culminated, and with it ended, the feudal régime of Japan. Each of the larger phases of the system,—its relation to the Emperor and civil nobility, to religious institutions, and to the military, agricultural, and mercantile classes of society, and its moral, intellectual, economic and institutional contributions to the present era of Japanese history,—presents a field of fruitful study. It is the aim of this essay to analyze some of the leading features of the rural aspects of the great system.

Generally considered, the main objects of this system can hardly be said to have been entirely selfish. Coming after nearly three centuries of continual civil war, Ieyasu was as eager to restore at last the peace and order for which the nation had long yearned, as to perpetuate the political power of his own family. It was in fact the primary motive of his policy that the power of his house should depend upon the stability of the realm¹. It may indeed be said that every important phase of the political system which he built was so designed as to subserve this double purpose.

It is this full consciousness of its aims that characterizes the Tokugawa régime and distinguishes it from its predecessors in the history of feudal Japan. Ieyasu and his councillors would run no risk and leave nothing to nature, wherever their human intelligence guided them. They made every effort to

avail themselves of the wisdom to be derived from the study of the past political experience of both Japan and China², and sought to adapt it to the peculiar conditions prevailing in the feudal Japan of the early seventeenth century,³ always with the steadfast purpose of insuring peace and of perpetuating the new régime.

The general system so framed was characterized, in all its phases, by a studied balance of two elements seemingly contradictory to each other, namely, government by rigid laws and government by discretion. The historian who sees only the former, in which an elaborate machinery was set in motion, as it were, regardlessly of the men operating it, would be puzzled to meet everywhere almost an excess of liberty that was left for the exercise of the personal sense of equity and proportion of the individual administrator. Nor would one succeed in regarding the latter element the only basic principle of the Tokugawa rule. It would seem that largely by a harmony of the two, the one not less important than the other, was served the primary aim of Ieyasu's government.

1. Government by rigid laws, which one might term institutionalism, may be conveniently discussed as in the following analysis. In the first place, a Chinese political idea was used to explain and emphasize the actual division of social classes. The nation was conceived as falling into two main classes, rulers and ruled, with a broad division of labor between them: the rulers to govern and in return to be supported, and the ruled to support and in return to be governed.⁴ True to the feudal nature of the society, the rulers were mostly warriors,⁵ and the ruled were mostly tillers of the soil. The separation between the noble functions of the former and the ignoble services of the latter was distinct and decisive, each class living a separate life from the other, with its own laws, education, taste and views of life.⁶ Less than two millions of the fighting class were thus superimposed upon more than twenty-four millions of the producing class.⁷

In the second place, let it be noted that in each of the two classes, and in their mutual relationship, there had developed in the course of previous history an ill-defined but important division of sub-classes, which the Tokugawa rulers now organized in a minute and rigid gradation of rank. To enumerate but a few of the chief steps in the hierarchy, such

as concern the subject of this essay. The Suzerain⁸ appointed about forty Intendants⁹ with regular salaries over his own Domain Lands.¹⁰ He also received allegiance of more than two hundred large and small Barons,¹¹ who, with some of their vassals, ruled over their respective Fiefs.¹⁰ The suzerain's domain lands were assessed as equivalent to about a fourth of the aggregate of the fiefs of all the barons.¹⁰ His intendants stood in their respective districts in immediate relation with representatives of the peasants, but the barons and their larger land-holding vassals were removed from the rural population under them by one or more intermediate grades of officials,¹² whom we might conveniently designate Bailiffs.

The peasants of each Village^{13 & 14} were themselves divided into classes, according to their tenures.¹⁵ They, however, were all under their Village-Head,¹⁶ usually one but sometimes more, either elected or hereditary, and, holding office annually, for a term of years, or for life. He was assisted by several Chiefs,¹⁶ and was, with the latter, under the counsel and supervision of one or more selected Elders.¹⁶ In larger fiefs there frequently were District-Heads, who, being also of the peasant birth, each discharged in a group of villages functions similar to those of the heads of individual villages.¹⁷

In the third place, all these grades were held together by a carefully studied system of checks and balances. These were evidently conceived in accordance with the two familiar principles that have characterized many a bureaucratic government in history, and were especially developed in China,¹⁸ namely, the principles of responsibility and of delegation,—the delegation of the suzerain's powers to his subordinate officials, and the responsibility of each functionary for his official conduct to those above him. Each official was inviolable,¹⁹ so long as he acted within the powers delegated to him, and each law was sacred,²⁰ so long as it embodied the just will of the highest authorities. Every person, however high, was answerable for his act to his superiors, and the suzerain's punishment for wrongs committed by even the greatest baron was swift and was witnessed by all men under him.²¹ It was very common that the officials or even all the members of a corporate body were punished for a grave offence committed by one of the latter, or otherwise held responsible for the due performance of public duties enjoined on them. This was especially

the rule with rural communities, with city wards, and with merchant and artisan gilds.²² It would not be difficult to see that the double chain of delegation and responsibility was forged in order to hold the society solidly together.

2. Beside these rigorous institutional arrangements of the Tokugawa régime, the latitude it carefully and generously left to the individual administrator for the exercise of his sense of equity and right proportion is all the more remarkable by contrast. Unless the suzerain's motive of deliberately balancing these two opposite principles is thoroughly appreciated, the story of his government is apt to baffle us at every turn, and has in fact betrayed many writers into inevitable errors. Rule by discretion should be absent in no form of government, and is likely to play a large part in a feudal government, which usually comprises arrangements essentially private and personal in origin. In the Tokugawa régime, discretionary conduct of affairs formed a predominant feature of its operation, and, what is more important, was maintained side by side with a rigid institutionalism, some phases of which we have analyzed, both elements supplementing and rectifying each other. The law was framed, or, at least, such was the ideal, with the conscious intention at the same time to guide the blind magistrate by its provisions and to allow the wise magistrate to supply them with his wisdom.²³ Once promulgated, therefore, the law was a ready instrument in the hands of benevolent and experienced rulers.²⁴ Not seldom was it expanded, bent, or even overridden, to give free play to a higher sense of equity.²⁵ This was, in short, a system of government one half of whose success depended upon the skill and the justice of the individual official, the other half being provided for by minute laws. The first half, it is easy to see, was ever liable to be turned to abuses by corrupt men, and the second always tended to become mechanical and unwieldy. The careful combination devised by the Tokugawa rulers served their aims with rare success, but failed them in the end, for, indeed, no human hand could strike an even balance and effect a complete organic union of the two factors for all time.

So much for the general system. We are now ready to devote our attention to that part of the Tokugawa régime which concerned the rural population, and observe how it

illustrates the general reflections we have made, and how its peculiar conditions reacted upon the entire system.

The peasants were a class destined, as has been said, to be ruled by warriors and in return to support them with fruits of their labor. It was first of all necessary to keep them submissive. There was no thought of ever allowing them to take part in the government of the country or even of the fief. Not only would they be incapable of the work, but it would in all probability result in breaking the very fabric of feudal society. Nor was it a difficult problem to enforce passive obedience upon the peasants, for, habitually employing dull wood and metal as tools, as they do, and depending on mute but irresistible forces of nature, the peasants are always the mildest and most patient class of people. The rank and dignity of the authorities command from them more genuine respect than from merchants in the cities. Political ideas grow but slowly among the peasants. Their mental horizon is apt to be limited to their own interests, which are at once circumscribed and protected by custom. Only when these interests, their only citadel, are unreasonably attacked, they would be seen to lose their equanimity and become as ferocious as an enraged ox. So long as their interests are safeguarded, however, peasants would be a malleable material in the hands of a wise ruler. This was especially the case with the Japanese peasants. They had for centuries been inured to passivity. They were in most instances accustomed to a gregarious mode of living in old hamlets,—a fact which tended to develop fixed social forms and sanctions and a cordial spirit of mutual dependence and assistance among themselves. It will be seen later that this tendency was promoted by the Tokugawa rulers with extreme care. Altogether, this was not a life conducive to independence of thought and action.

Obedience, however, might not be contentment. It was necessary to control the peasants in such a way as to render them, not only submissive, but also contented,—so contented, if possible, that they would counterbalance whatever unstable elements of society there existed in and out of their circle, and throw the weight of their native desire for order and conservatism in the interest of peace and of the perpetuation of the régime.

This double task was at once imperative and difficult, for the Japanese peasants of the seventeenth century were less easily contented and should therefore be appeased with all the greater solicitude, than the serfs of the thirteenth. Not only did they form the bulk of the nation, and were, from the economic standpoint, the support of the entire body politic;²⁶ not only was there a degree of community of interest between them and the warriors, as against the rising burgher class;²⁷ but also, more important than these circumstances, the peasants' position in relation to the land they tilled and to the warriors who drew revenues from the land had materially risen since the earlier period. Under the stress of the continual civil strife that raged before 1600, warriors found that they could no longer retain their rôle of seigneurs over landed estates, where they had for generations lived, in time of peace, amid their serfs, and, in time of war, defended their castles with their retainers. They were now obliged to betake themselves to the castles of the greater lords, to remain in their immediate neighbourhood, and to leave their land to be managed largely by the tillers themselves. From this time on, political conditions²⁸ accelerated the change already begun. By the beginning of the seventeenth century, most serfs had turned freer tenants, and many of the latter had become proprietors employing tenants and laborers.²⁹ A long experience had led the peasants to feel that the lord—and the lord became an impersonal being in the eyes of the peasants living on the suzerain's domain lands—cared much less for the land they tilled than for the dues levied upon it. This was in fact a fundamental point: the fiscal obligation of land, rather than the land itself, was now a controlling principle of the institutional life of the peasant. Between the lord and his land, the tilling of which he had overseen, had now stepped forth the peasant, who had formerly stood behind the land, and the lord's eye had turned perforce from the land to what the peasant should bring to him from it. The peasant had become the virtual, though not theoretical, owner³⁰ of cultivated land.³¹ This was a transitional state of things betokening a greatly advanced social position of the tiller of the soil. For although the process could not in all cases have resulted in his improved material condition, he must nevertheless under these circumstances have become more mindful of his rights and interests.

To illustrate. The lord's right of seizure over land³² had vanished, and even his right of escheat or mortmain, as the medieval jurist of Europe would call it, was very imperfect.³³ Succession by testament was common;³⁴ a collateral relative of the deceased to whom the latter had willed his holding inherited it without purchase-money ever being paid to the lord, and was, in default of a will and of a nearer relative, even compelled to do so, in order that the same dues as before would be forthcoming from the estate. As regards these dues, they were almost all levied on the productive capacity of each holding.³⁵ capitation or house taxes being unpopular and unimportant, a fact indicating how far was the peasant removed from personal servitude to the lord. Regulations concerning alienation of land by sale, gift, or mortgage,³⁶ and its division, were primarily actuated by the motive that the act should not affect the fiscal issues of the land.³⁷ In matters of personal rights, also, the same consideration largely prevailed. Change of residence between different parts of the country was discouraged, mainly because it might introduce elements tending to disturb the unity of village customs, and thereby conduce to unrest and a consequent fiscal derangement.³⁸ Marriage³⁹ was in no way interfered with, so long as it did not directly or indirectly tend to diminish the public revenue of the village. When, in later years of this period, the running away of impoverished peasants became frequent, the lord seldom exercised a right of pursuit,⁴⁰ provided the land deserted by the absconders was taken care of by their relatives or by the village and yielded the same dues as before.

All this points to a condition that deeply and radically affected all classes of the feudal society, and exercised a specially profound influence upon the rural policy of the period. The peasants were, indeed, still the "ruled" class, but it is easy to see that their interests called for the most scrupulous consideration of the suzerain's government. The barons, too, on their part, would court the good-will of the village population within their fiefs, for no lord could hope to wield influence for a long time over discontented peasants. The latter would often find a ready listener in the suzerain himself, who, while openly discountenancing popular riots and direct appeals, would eagerly punish the baron for maladministration and

indirectly right the wrongs of the aggrieved peasantry. Whether the suzerain or the baron, the inevitable criterion of distinguishing a good from a bad lord was the one's regard and the other's disregard for rural interests.⁴¹ And these interests could be studied only with sincere zeal and sympathy, for the peasants would not express themselves until it was too late—until their long pent-up grievances burst forth in violent mobs. The greatest stress was, therefore, laid everywhere upon the need of studying agricultural conditions and ministering to them with justice and skill.⁴² Under these circumstances, it was exceedingly difficult at once to secure from the peasants the degree of submission, and to grant them the degree of satisfaction, which were both absolutely necessary for the success of the régime. The ingenious and thorough manner in which this delicate work was generally contrived to be done by the feudal authorities is worthy of a careful study.

In the first place, the Tokugawa's village administration was an example of extreme paternalism at once kind and stern. It was here, that the greatest care was taken in balancing law and equity, inflexible justice and generous discretion. The fundamental conception was that the peasant was at once too passive and too ignorant to provide for the morrow, so that his ills should receive official attention even before he himself perceived their symptoms.⁴³ It was unnecessary, and sometimes dangerous, that he should understand what the authorities were doing for him, for they were afraid that his too much knowledge might interfere with their exercise of equity and arbitrary adjustment. He "should be made to follow," as said Confucius, and as was habitually repeated by the Tokugawa rulers, "but should not be made to know".⁴⁴ The peasants, accordingly, should not be allowed to become over-wealthy, for "if they grew too rich," said a practical administrator, "they would cease to work, and employ poor warriors to till their land, and so the distinction between the classes would pass away;"⁴⁵ yet the moderate holdings of the peasants were zealously protected by law and by precept, so that they would not become too poor. They should know in general, but not in exact detail, how their lands were valued, how their taxes were remitted or reduced in hard years, and what were the finances of the entire fief or domain land.⁴⁶

Nor was the penal law given publicity among them.⁴⁷ and most legal provisions came to them in the form of moral admonitions.⁴⁸ Yet the peasants were fairly well advised as to the general nature of the rights and obligations of their own class and of the officials directly concerned with their affairs. This knowledge was further reinforced by a qualified right granted the peasants to appeal from an unjust official to the baron or intendant, and thence to the suzerain's council.⁴⁹

Much of this paternalism and this limited publicity and protection was extended to the rural population by the rulers, and was utilized by the latter, in a manner at once effective and characteristic of their general policy. Ever since the Reform of 645, the Chinese village institution known usually as *pao* or *lin* had been familiar to Japan. It consisted in dividing the inhabitants of each village into groups each comprising a certain number of house-fathers, who were held responsible for the order, the good behavior, and the performance of the political obligations of all the members of the respective groups.⁵⁰ The institution was copied in Japan after the seventh century,⁵¹ and, despite the general social changes which followed, lingered till the beginning of the seventeenth. Then the early Tokugawa government seized upon it, and forced it on the lower warrior classes and the entire village and municipal population throughout the realm.⁵² The normal group of peasants, usually termed the five-man group, consisted of five land-holding house-fathers living near together, with all their family-members, dependents, and tenants.⁵³ It was continually ordered, and the order was well carried out, that every inhabitant in the village, no matter what his status or tenure, should be incorporated into the system.⁵⁴ That this old institution should now be, as it was, so eagerly resuscitated and so universally extended, was evidently due to a belief based upon the past experience in China and Japan, that the system would enable the rulers to attain with the least possible cost and friction a large part of the aims of village administration—to secure peace and order, to afford the exact degree of control and freedom that was deemed necessary, to insure a prompt return of the taxes, to inculcate the moral principles most desirable in an agricultural society under a feudal régime, and, above all, to hold the people responsible for most of these results.

Let us observe how these things were done through this simple institution. The responsibilities and the rules of conduct of the villagers were made known to them through edicts, public sign-boards, and also oral exhortations given by the intendant or bailiff and the village-head.⁵⁵ The more important of these rules were re-iterated to the peasants with great persistence.⁵⁶ Gradually, from about the middle of the seventeenth century, the older custom of certain warrior-officials to present to their lords written pledge under oath to fulfil their orders, repeating them as nearly as was practicable in the form they had been given, was extended to the five-man group in the village with respect to its duties. By the end of the eighteenth century, there probably were few villages in Japan that did not keep their so-called group-records (*kumi-chō*).⁵⁷ The record began with an enumeration of such laws and precepts as had been repeatedly given to the villagers, and ended with an oath that those would be strictly obeyed and enforced in the village. All the house-fathers put their names and seals after the oath in the order of their groups in the village. The record was then periodically—in some instances as often as four times in the year or even once a month—read and fully explained by the village-head to all the people in his charge. As new laws were enacted, or as the village population changed, the record was revised and made anew, with the usual oath and affixed seals.⁵⁸

These laws,⁵⁹ which were thus published among the people through edicts, sign-boards and group-records, and for the execution of which the peasants were held responsible by means of the system of the five-man group, are among the important sources for the study of our subject. Attempts may be made to reconstruct the rural government under the Tokugawa upon the basis of these laws. It should be noted, however, that they were never the whole of the laws relating to village administration. As has been stated, the penal side of the laws was, except in a few rare cases, carefully concealed from the peasants, the latter being merely told what to do and what not to do.⁴⁷ Nor should it be forgotten that, even after studying penal laws from other sources, we could not be certain that all the law thus collected presented a sound basis for a discussion of the entire subject. In order to obtain a comprehensive survey of the institutional life of the village, it

would seem that one should do three more things from a vastly greater amount of materials. The laws should be interpreted in the light of the social and political conditions which called them forth. Then it should be studied how far the laws were actually enforced, how much they accomplished the result they were purported to bring about, and how they reacted upon the society. Finally, one should carefully examine if there were not certain conditions in the life of the village and of the nation that were too universal or too vital to find expression in the laws or to be materially affected by their operation.

From these points of view, it may almost be said that the first problem of the village administration under the Tokugawa, —of the paternal rule over the responsible village and the five-man group,—concerned its financial affairs, and that most of its other features were so modelled as to facilitate the collection of the taxes. Simple morals were inculcated for the sake of peace and order, and economic life was carefully regulated for the maintenance of moderate prosperity, but the peace and the prosperity subserved steady fiscal returns of the village. Nor is this strange when we consider that the peasants constituted the large class of people whose foremost part in the life of the State was to furnish the means to carry on the government of the nation. The warriors ruled the peasants, and the peasants fed the warriors and themselves. Few provisions of the laws for the village had no bearing, direct or indirect, upon the subject of taxation; few phases of the entire structure of the feudal rule and of national welfare were not deeply influenced by the solution of this fundamental problem. It is, therefore, not impossible, as we are about to do, to treat the whole subject of village government with its financial problem as its center.

If we might be allowed to anticipate a conclusion of this discussion, we should venture to say: it was probably inevitable, but it was none the less a tragic outcome of the Tokugawa régime, that, between the mounting expenses of the government and the falling or, at best, stationary productivity of the soil, the taxes should, as they did, grind upon the peasants with increasing weight, and that this fundamental malady should gradually sap the vitality, not of the nation, but of the whole system of government. It has often been said that had there

been no pressure from foreign Powers causing the downfall of the Tokugawa government in 1868, its days had then been all but numbered, and the statement seems the most tenable on the financial side of the question. That such a result was inevitable appears to have been due primarily to the fact that, from the economic standpoint, the feudal system in general was costly, and that the Japanese feudalism after 1600 was particularly wasteful.

It needs no reminder that feudalism as such would afford too inefficient an economic organization for a government whose growing budgets must be supported only by an increasing wealth of the nation. Agriculture, upon which the feudal society was built, was at the mercy of natural forces, and at its best could not support a large population. What few people subsisted therein could not hope to increase their wealth at a rapid rate or on a large scale, because they were encumbered by regulations designed to maintain rigid and stable classes of society, and by customs which frowned upon sudden departures from the settled routine of life, and because the intercommunication between the fiefs was inadequate, if not restricted. Even when it was tolerably free, its economic value was small, in proportion that money was scarce, credit undeveloped, and capital immobile. Under these conditions, both the population and the wealth of a normal feudal society would, as long as it retained its character, remain almost stationary.

It will, however, require an explanation that the economic organization of Japan under the Tokugawa was abnormally wasteful even as a feudal society. Out of the many circumstances that may be thought to have contributed to this state of things, we may introduce three at this stage of discussion, namely:—the separation of the warrior from land; an exhaustive degree of paternalism, attended by some serious errors, in the economic policy of the government; and finally, a long reign of peace breeding luxury and extravagance. The first of these conditions awaited the Tokugawa at their accession to power in 1600.

(1) Separation of arms from land. It has already been alluded to that the continual turmoil during the period of feudal anarchy in the fifteenth and sixteenth centuries had forced many a warrior to become a professional fighter, and to leave

the country and to live near his lord's castle. The introduction of gun-powder about 1543, and the consequent progress in organized tactics, accelerated this process. A further impetus was given by Nobunaga and Hideyoshi, who for political reasons forced large bodies of warriors to migrate from one place to another. During the period of civil wars, the military service of the vassal was often compensated for in money or in rice. When a baron apportioned a piece of land to his vassal, it often meant that the latter was granted the right over the dues from the land (所當の知行), instead of over the land itself (下地の知行). In this case, he was far from overseeing its cultivation in person, for he lived in his lord's castle-town.

This custom had so long been established in 1600, was so strongly reinforced by the increase of dispossessed warriors of the Osaka party in that and subsequent years, and indeed so much facilitated the control of the warrior class, that the Tokugawa found it not only impossible, but also impolitic, to return to the older system of feudal arrangement.⁶⁰

It was a natural order of things that the congregation of warriors in the castle-towns, and, as it was now required of a large number of warriors in each fief, in the assigned quarters in Edo, should tend toward a greater cost of living than before. What was more important, the separation of arms and land made the collection of taxes more indirect and expensive than in former days. It was common in the early years of the fourteenth century that a knight with his attendants on foot could be maintained on seven acres of the average rice-land. Such a condition was, however, regarded unthinkable in the Tokugawa period,⁶¹ and the difference was generally attributed⁶² to the greater cost of living and of tax-collection due to the warrior's absence from the country. It will be seen later how the otherwise expensive system of indirect collection through several grades of officials led, also, to inevitable leakage and corruption.⁶³

(2) Economic paternalism. In their zeal at once to secure rural tranquility and to insure steady returns of the taxes, the Tokugawa rulers continued throughout the period to enact and enforce minute regulations of agriculture, which must have had a benumbing effect upon the economic sense of the people. In one fief, the hereditary estate of the peasant

family was limited to between 500 and 5000 *momme* in productive value, representing probably about 1.25 to 12.5 acres of the average rice-land, and in few places in Japan estates smaller than 10 *koku* in assessed productive value, or perhaps about 2.5 acres of the same quality of land, were allowed to be divided amongst children.⁶⁴ Agriculture was encouraged with great care. The villagers should look after the fields of those who were unable to work, and all should equally share the disaster of a drought or an inundation. Subsidiary occupations, especially the production and manufacture of silk, were in many places fostered and controlled.⁶⁵ Careless cutting of bamboo and trees,⁶⁶ the raising of useless and harmful crops, including tobacco,⁶⁷ the building of new houses upon cultivated land, and a host of other actions, were forbidden on pain of joint punishment of the village or the group. Public granaries⁶⁸ were established everywhere, and the manufacture of *sake*⁶⁹ was kept within bounds.

Other occupations received perhaps more interference and certainly much less fostering care than did agriculture. The change of a peasant into a merchant was not permitted.⁷⁰ The dimensions of woven fabrics, the output of merchandise, and the scale of wages of several forms of labor, were often fixed by law, while commercial transactions at rates higher or lower than current prices were declared illegal.⁷¹ The repeated debasing of coins by the Edo government, and the unfortunate custom of allowing certain cities to issue copper coins and many fiefs to circulate paper currency,⁷² must have seriously interfered with the growth of credit and legitimate commerce, and reacted unfavorably upon the economic life of the village.

Most stringent were restrictions relating to communication. There were many barriers at strategic points on the approaches to Edo, and, besides, minor passes impeded travel between and even within fiefs.⁷³ Indeed, the very village could be considered a barrier in itself, for no unknown character should find in it even a night's lodging, it being illicit even for a hotel to keep an unaccompanied stranger for more than one night. Nor should the peasant go out of the village to pass a night elsewhere without an explicit understanding with village officials. There is reason to believe that the regulations of communication were enforced with a large measure of success.⁷⁴

It would be unjust, however, not to appreciate the probable motives which had compelled the authorities to issue these paternal measures of economic control. The prosperity of the warrior and the peasant depending on the success of the rice harvest, their interests were, especially in bad years, largely common, but antagonistic to that of the rice merchant.⁷⁷ If, in years of rich crops, the peasant rejoiced and the warrior suffered, for the latter's income in rice would sell cheap, even then the merchant, who bought the grains at a low price, pleased neither the one nor the other. It was considered essential for the officials to insure the steady, mild prosperity of the farmers, and, at the same time, to prevent the merchants from profiting at the expense of the rulers and the bulk of the ruled. Few things were more dreaded as a dissolvent force of social organisation, than the passing of the control of the economic life of the nation from the warrior to the merchant.^{74a} It is an important phase of the history of this period, which falls beyond the scope of this paper, that this perilous situation steadily grew up despite all the effort of the feudal government to arrest its progress. The presentiment felt by the authorities of this impending crisis is reflected in the nervous zeal with which they continually issued strict economic measures, some of which have been described.

(3) Peace and luxury. It would be difficult to gage the evils of so extreme a form of economic paternalism, for, immense as they must have been, they were largely negative. Flagrant, positive evils resulted from the long period of peace lasting for more than two and a half centuries,—the golden peace for the creation of which the founders of the Tokugawa régime had exhausted their wisdom, with so large a degree of success, and which enabled the brilliant civilisation of the Edo period to rise.

We have space enough merely to allude to the enormous expenses which the peace policy of the suzerain entailed upon all the barons throughout Japan. The baron's own income, after deducting from it the emoluments for his retainers, was seldom large, and yet he had to bear sundry expenses very onerous in proportion to his means, and, besides, render his regular, though seemingly voluntary, dues to the suzerain. Other occasional requisitions from the latter for special purposes were a source of continual embarrassment to the baron.

Many a baron was thus obliged to borrow heavily from his vassals, who could rarely expect reimbursement. Unfortunately, when the circumstances of the baron and the vassals became more straitened, their luxurious habits had advanced too far to be checked, much less to be eradicated. What had greatly tended to bring about this condition was the fact that each baron was obliged to pay his annual visit to the suzerain's court at Edo with his full retinue, and to maintain two establishments worthy of his rank, one at the Capital and the other at his castle-town. Edo was the fountain-head of luxury and extravagance, and its fashions were through this system of continual communication quickly diffused into all the chief centers of culture. There was little doubt that the system helped the prosperity of the Capital and of the towns on the high roads, but at the expense of the warriors and peasants. It was the suzerain's policy to impoverish the barons, and it was the barons' part to replenish their coffers from the peasants. The periodic absence of the baron and some of his vassals at Edo had also resulted in many a case in conspiracy or corruption among the retainers in the fief, which again bore heavily upon the tax-paying class.⁷⁵

In the meantime, the suzerain's own finances at Edo, despite the great care with which the fiscal administration of his domain lands through his intendants was supervised, showed deficits that swelled as the luxury of his court progressed. They were barely balanced by the seigniorage derived from an increasing adulteration of the gold and silver currency.⁷² Many of the suzerain's immediate vassals residing at Edo were plunged into abject poverty.⁷⁶

Nor should it be forgotten that there was something radically anomalous in the very idea of a perpetual tranquillity of a feudal society—an "armed peace," or, peace of an agricultural community guarded exclusively by a warrior class which did neither fight nor produce. All the numerous sumptuary laws⁷⁷ enacted during this period for the warrior classes could not check the growth of luxury and extravagance of the unproductive and unoccupied men of arms. Indeed, sumptuary laws in a society where one class produces at best a fixed amount of wealth, and the other spends it on an increasing scale, are highly significant. Here they are always necessary and always ineffective.

All these evils were greatly intensified by the luxurious habits that had seized upon the peasants themselves. Before we discuss the effects of peace and luxury upon the economic life of the village, let us first observe how the peace itself had been secured therein.

Here, again, the paternalism of the government was, for evident reasons, hardly less exhaustive than in other matters of village administration. The family institutions—marriage, adoption, succession, and inheritance—were well guarded and controlled. The group and the entire village were made to be actively interested in the peace and in the maintenance of each household.⁷⁵ The peasants should watch and correct one another's conduct.⁷⁶ and disputes should as far as possible be adjusted by mutual conciliation.⁸⁰ Private expulsion of an unruly member was rarely permitted,⁸¹ while sales of persons were illegal.⁸² Virtues which were inculcated among the villagers, and for the practice of many of which they were made responsible, were: filial piety, concord within the family, diligence, patience, obedience, charity, and mutual helpfulness in the hamlet.⁸³ It was a common duty of the village to provide necessary measures for preventing and extinguishing fires, and arresting robbers and disorderly persons.⁸⁴ Most heinous were riots of all kinds; for the mobbing of an intendant's office, for example, not only were the culpable parties beheaded, but also the village-officials were fined, deprived of land-holdings, or banished.⁸⁵ Peasants were strictly forbidden to own fire-arms or to carry swords.⁸⁶ It has already been shown that no one might without permission lodge a stranger or himself stay out of the village even for one night.⁷⁴ All the servants hired into the village had personal sureties responsible for their good behavior.⁸⁷ Catholic converts were excluded most rigorously.⁸⁸ Dealings in smuggled foreign wares were forbidden.⁸⁹ No books interdicted by the censor were to be admitted,⁹⁰ while the study of Confucian classics by the peasants was discouraged.⁶ Festivals should not be celebrated on a larger than the usual scale, and no novel religious sects or practices should be initiated. The Buddhist church, whose rights were very narrowly circumscribed, was utilized as an agent of peace and contentment.⁹¹ It is not possible to enumerate other details of the careful measures which were provided for the purpose of maintaining the unity of village customs and population.

It is more important to know that not only did these measures successfully insure the social stability for which they were intended, but the effects they produced contained evils which could not have been entirely foreseen, but which, once grown, no new laws could eradicate. The artificial, dead peace, together with the debased currency of the period, had continually tended to breed luxury even among the toiling population of the village, and, furthermore, luxury did often so operate as to reduce the productive capacity of the peasant family. The logic of this serious condition is clearly shown in an outspoken memorial²² written in 1790 by a man in the Sendai fief who was familiar with rural conditions of the period and strove to improve them.

"Formerly", says he in one passage of this interesting document, "when the farmer could bring up two, three, four or five sons, all the younger sons were hired out by other farmers as soon as they were old enough, saved their wages, and married or were adopted into families. There was everywhere an abundant supply of cheap labor for the field. The farmers could also keep horses, which yielded manure. The productive power of the soil was therefore large, and rice was plentiful. They could likewise afford daughters. Marriage was inexpensive, the population increased at the normal rate, and the Heavenly Law was fulfilled." But now, continues the writer, marriages cost the man nearly 30 *kwan* and the woman's family almost 40. It being increasingly hard to maintain a household, the average peasant seldom had more than three children, and the poorer tenant only one child. Labor was scarce and dear, having risen from 5 or 6 *kwan* to more than 10, and rising every year. Horses were fewer, and manure less. It being in many instances impossible to take care of one's own holding, it was rented to some one else who seemed willing to till it, but who would be inclined to neglect the land that was not his own. In recent years most land yielded on the average only 15 to 16 *koku* per *chō* (74.5 to 79.5 bushels per 2.45 acres), instead of the former average of 20 (nearly 100 bushels). Yet the peasants understood little the cause of their trouble, and did not abate their thoughtless extravagance.

It is true that this document speaks of conditions in a particular fief, but, while some districts fared better, there

were others whose lot was still worse.⁹³ The universal and persistent enactment of sumptuary regulations for the rural population⁹⁴ has led some writers to fancy that the Japanese peasants must have been a model of frugality, but it is another evidence of the prevailing trend for needless luxury and the increasing difficulty of checking it. The village life under the Tokugawa would, of course, be considered extremely simple, according to the modern standard, but it was in many places positively extravagant in proportion to their limited earning capacity.¹¹⁵

To sum up the forgoing discussion of the wastefulness of the Tokugawa feudalism. Peace and luxury led the peasants to spend, and the same condition, added to the peculiar feudal arrangement of the period, impelled the warriors more and more to absorb the wealth of the nation that, owing to the exclusion of foreign trade and to the inadequate economic organisation of society, could not be increased correspondingly, and did in many instances diminish. We shall discuss briefly how these conditions influenced the system of taxation, and how the latter reacted upon the life of the village.

The taxation of the Tokugawa period clearly reflects the important characteristics of its feudal system. The separation of the warrior from land had resulted in the peasant's financial obligations acquiring the general appearance of being public taxes to the government, rather than personal dues to the lord. The State as a whole was largely feudal, but smaller districts were more bureaucratic than feudal, and it is here that one has to discover the working of the system of taxation. There was very little in the whole system that savored of obligations due directly from the peasant to the lord. There were no banalities; whatever *corvée* originated in the personal relationship had become overshadowed by or incorporated into the *corvée* for the public; the peasant had no opportunity to entertain the lord at his own house, and was explicitly forbidden to entertain his agents; and confiscations of land were rare and meant merely changes of cultivators.

The principal tax was the land-tax, levied, as has been said,⁹⁵ not upon each peasant as an individual person, but on the officially determined productive capacity of each holding. From the purely fiscal point of view, the peasant would be

considered an instrument to make the holding continue to yield what it should.

The Tokugawa inherited this system from the earlier feudal ages, which in their turn had accepted, though with serious changes, the Chinese notion of land-tax adopted in Japan in the seventh century. We are unable here to trace the interesting evolution of this tax in Japanese history, but the following data would be necessary for an understanding of the Tokugawa system. The land-tax was originally, when it was copied from China, a capitation-tax, paid by the head of each family as a unit, but assessed on the basis of the equal pieces of land allotted to all the peasants in the family above five years of age. From thus being a personal imposition levied through the family, the tax changed, during the transitional and the first feudal periods, into a tax still levied through the family (now nearly identical with the house)⁵¹ but assessed on its land-holdings. From this point on, this fundamental nature of the tax remained constant, but the method of its assessment, which had been made uncertain at the aforesaid change in the nature of the tax, gradually tended to become uniform and definite. At length, under Hideyoshi, at the end of the sixteenth century, the principle had been firmly established that the tax on each holding should be assessed at a certain rate upon the annual productive capacity measured and recorded in terms of hulled rice.⁹⁵

In the meantime, the ratio between the tax on land and its annual productivity, which in the eighth century was at most 5 per cent., had risen high during the thirteenth, due largely to the fact that the land-tax superseded other taxes, and then remained substantially the same till 1600 at 50 per cent. more or less. A strong tradition had grown up that the tax should not be raised much beyond this limit. Nor could this rate, high as it may seem, be considered extortionate from the point of view of the period. For, it should be remembered that, in the conception of the feudal lawyer, the peasant was the virtual but not the theoretical owner³⁰ of the land he tilled, and his land-tax was rather a rent than a tax. Even as a rent, the rate could not be said to have been always excessive. When, after the fall of the feudal government, a complete survey of the cultivated area of Japan was made between 1873 and 1881, it was discovered that an

annual tax of 3 % of the average assessed value of agricultural land would give a sum equal to the land-tax levied under the feudal rule.⁹⁶

In 1600, when the Tokugawa came to power, they accepted in general the current method of assessing the productivity of land and the prevalent tax-rate, and modified and elaborated them with their characteristic care. While they were in no position to initiate a much lower rate of taxation, they showed an unmistakable disposition to lighten the burden of the peasant by various devices, some of which follow.

(1) The annual productive power of each land-holding was measured with scrupulous care, and determined usually a little below its actual capacity.⁹⁷ What was more, there was a constant tendency to make the tax-rate itself definitely fixed beyond the caprice of the collector. This rate, even including the minor levies⁹⁸ connected with the main tax, was, at least in the domain land, often below 50 %.⁹⁹ The assessment was probably at the time considered as not unreasonable. The apparent iniquity of the feudal tax arose, not so much from its rates, as from the method of its collection, and from the too infrequent revision of the recorded productivity of the holdings. The former of these difficulties will be discussed in the Notes^{102 & 103}. As regards the latter, the probably complete records made during the first half of the seventeenth century, and the confessedly partial revision of the early eighteenth century, seem to have remained unaltered except in cases of urgent need. It is easy to see that both the area and the productivity of most pieces of land must have changed much during the more than two centuries of the régime. That such was the case was abundantly proved during the recent survey just referred to.¹⁰⁰

(2) The Tokugawa government allowed a greater freedom than in the earlier period of partially commuting the land-tax into money. Local customs varied on this point, but frequently as much as half the tax was thus paid in money.¹⁰¹ That this was an important gain for the peasant will be seen when we note that the village was held responsible for the collection¹⁰² of the tax, and for its transportation, either to Edo, if the village was situated in a domain land, or to the lord's store-houses, if it formed a part of a fief.¹⁰³ This burden remained oppressive, for no region was permitted to commute

all its taxes into money, but the burden would have been greater but for the limited commutation allowed.

(3) The old system of remitting taxes for special reasons was minutely elaborated under the Tokugawa. Remissions partial or entire, temporary or permanent, were granted to wood and waste land, land reserved for public purposes, newly tilled land, land once recorded but long since non-existent, land wasted by natural calamities, and the like.¹⁰⁴ In this connection may also be mentioned the loans of seed-rice and rice for food issued by the authorities in bad years.¹⁰⁵

In fact, the land-tax could not, from its very nature and from the strength of the customary law, be increased beyond, say, 60 per cent., at most, of the estimated productivity of the soil. There were other items of taxation, however, which could be and were, especially in fiefs, expanded almost indefinitely. These were: *corvées*, sundry customary taxes, and special taxes on products and occupations. Generally speaking, all the three kinds of taxes were apt to be more uniform in the domain land than in the fief, and, within the latter, in the baron's own land than in the land granted to the vassal.

The *corvées* were of two different kinds: labor for the baron or his vassal, whichever it may be, who had the superior right over the land in which the peasant lived, and labor for the public. The former was rendered in repairing the fences and thatched roofs of the lord's buildings, transporting his wood for fuel, and the like; the latter consisted mainly in repairing roads, bridges and other public works. The *corvées* were levied either on the holding in land or on the adult peasant, and were often commuted in money. They were sometimes, in the first part of the period, partially paid for, and the expenses for extraordinary public works, as, for example, after a flood or an earthquake, continued to be supplied by the authorities. The general tendency in the fiefs was, however, toward a gradual increase of the imposition of unpaid labor. In 1616, the *corvée* in the Akita fief was 236 day-men per 100 *koku*; in 1845, it was in the Sendai fief as high as 6000 or more day-men. In 1799, the Mito fief employed nearly two million day-men out of the peasant population of two hundred thousand.¹⁰⁶ These figures do not include the poorly paid service of the post-horse system, which proved a great burden to peasants near the high roads.¹⁰⁷

Of the customary taxes, some, as, for example, straw, bran, hay, and wood for fuel, seem originally to have been used, at least in part, in connection with the *corvée* for the lord, but were later commuted into rice and money, and became independent dues. There were several other taxes, including dues for the baron's groceries, for the bait for his hawks and fodder for his horses, for the performance of Shinto ritual services at Ise, and the like, which, beginning as incidental or local dues, became customary and universal within the fief. The villages of the domain lands paid fixed taxes whose issues were intended for the maintenance of the post-horse system, of the officials in charge over the suzerain's store-houses in Edo, and of men employed in his kitchen, all levied on the peasant holdings. On the same basis were imposed, in both domain lands and fiefs, dues paid in beans, a kind of sesame, millet, and glutinous rice, as well as those levied nominally on certain domesticated plants, on the use of grass on wasteland and of ponds and rivers, and many other items. These taxes would be considerable in the aggregate, even if each was small and did not increase, but in many a fief some of them were neither small nor fixed. At Mito, for instance, the bean, sesame, and millet taxes alone amounted to nearly 10 per cent. of the recorded annual productivity of land; at Akita, the bran, straw, and hay taxes, converted into money, increased from 4.8 lbs. of silver per 100 *koku* of the productive value of the holding about 1650 to 32.3 lbs. about 1860. These were conspicuous, but not extreme, examples. Perhaps not the least objectionable feature of the customary taxes was that frequently they were collected by officials specially despatched to the villages at a time when the latter had already paid their annual land-tax and were again almost as poor as before the harvest. The fear that the main tax might suffer if the customary dues were collected at the same time with it was so great that the latter were usually preceded by the former. Nor were they always consolidated, as they sometimes were, to a large saving of the expense of collection. Commuting in money was not always a blessing, for the rates would be unfavorable, particularly when the taxes had been, as they often were, farmed out to private collectors.¹⁰⁸

The evils of farming were probably more frequent with the taxes on various secondary occupations and products other

than the grains. These dues were extremely numerous in every fief or domain land. They did not always fall directly on the farmers, but nevertheless redounded to them in the form of increased prices of articles. As we come nearer the end of the period, especially after 1800, we see barons' governments recklessly multiplying the kinds of taxes of this class.¹⁰⁹

Over and above these multifarious taxes, there were expenses of the village administration to be borne, including the salaries of village-officials, repairs of the public works of the village, cost of policing the village against fire and robbery, of entertaining visiting officials, of making petitions, and the like. They were levied either on the holding, on the individual peasant, or on each peasant family. They were at first almost negligible, and, in the suzerain's domains, where the accounts of the village were to be open to the inspection of the peasant, continued to be comparatively light. In some fiefs, however, it was not uncommon that, owing to the venality of village and higher officials, the village expenses equalled or exceeded the total amount of taxes for the fiefs.¹¹⁰

That the bribery of the officials was a frequent and serious evil is reflected in the continuous repetition of the instructions issued to them on this point and in the persistent order to the peasants to impeach corrupt officials. Unfortunately, however, there was every temptation for corrupt practices to grow up between the feared but ill-paid official on the one hand and the passive and blindly self-interested peasant on the other. For a considerate though illegal act of an official at the assessment or collection of a tax, a farmer would be induced to entertain him at his house, to bribe him, to sell him things at a nominal cost, or to borrow from him at usurious rates. Examples of self-denying rural administrators were not wanting, but more frequently both people and officials came to regard taxation as a field for secret dealings and understandings.¹¹¹ These easily escaped the notice of special supervisors that the suzerain and the baron occasionally sent in circuit about villages,¹¹² and continued to raise the expenses of the peasant.

Moreover, it should be noted that, both the suzerain and the baron ordered special irregular requisitions in addition to the regular taxes. Indeed, it was one of the suzerain's favorite methods of weakening the barons to impose requisitions upon the fiefs for extraordinary needs, such as the building

and repairing of the temples at Nikkō and Edo and of the Imperial palace, his own journeys to Kyōto, the reception of foreign envoys, and, in the later years, the defense of the coast against European aggression. Besides these requisitions from Edo, which were borne ultimately by none but the tax-payers, the people of specially ill-governed fiefs were subjected to illegal and irregular exactions by warrior-officials, some of whom even went to the extent of collecting the next years' taxes in advance.¹¹³

All these numerous taxes—levied in so complex a manner on the peasant holdings, families and individuals, paid at so high rates in money, labor, rice and other products, and, above all, increased so continuously in many of their secondary items,—were, nevertheless, insufficient to meet the growing expenditures of the government.¹¹⁴ Still more unfortunately, when the tax-rates, originally high enough, were being raised, the productive power of the peasant family was, as will be remembered, already declining. If, in 1650, from his holding of 1 *chō* (2.45 acres) of rice-land, a peasant paid out of the average crop of 20 *koku* (about 100 bushels), 5 *koku* of the land-tax, 2 or 3 of the other taxes, and netted the remaining six-tenths of his income, he would, in 1800, be able to raise but 15 *koku* on the same land, while his land-tax and other dues had risen to 10 or more and village expenses absorbed at least 5. He had become a mere tool to move the spade.¹¹⁵ How was he to provide for his farming implements, horse and harness, incidental expenses, irregular imposts, sickness, and calamity? Where was the money to buy the very manure? This last question was serious, for although, it is true, the Japanese peasant was fortunate in being able to rely so largely on human labor and human manure, it was none the less becoming more and more difficult to go without buying other manure, as new land was tilled, rotations of crops were discarded, and the farming was growing yearly more intensive.¹¹⁶ When the farmer wished to borrow, he had to submit to rates of interest as high as 25 or 30 per cent. per annum, so that, it was said about 1720, a debt of five *ryō* would ruin his family in five years.¹¹⁷ That the average peasant did subsist despite these alarming conditions was due to the sundry crops of cereals and vegetables he was obliged to raise, and to such subsidiary industries, including the silk-culture, as he was

compelled to pursue.¹¹⁸ These, of course, if they brought to him the needed income, also made his otherwise arduous life toilsome to the extreme.¹¹⁹ Signs of his weariness, both material and moral, are visible from the early years of the régime, and continued to multiply through the period.¹²⁰ Conservative as he naturally was, his fortune altered and his land changed hands with much ease.¹²¹

One will now be able to appreciate the deeper significance of those minute measures of economic and moral paternalism of the feudal authorities which were discussed earlier in this paper. It was by dint of these measures that the meagre prosperity of the peasant might be maintained at all. The government was not, however, content with negative orders alone, but also eagerly encouraged the tilling of new land, putting restrictions only where they were necessary.¹²² and, it must be admitted, succeeded in making the acreage of cultivated land probably twice as large at the end of the period as at the beginning.¹²³ It would be difficult to overestimate the importance of this great fact, and yet it was not a pure gain to the peasant. The consequent decrease of waste-land deprived him much of the manure which Nature had afforded in the form of decayed hay, while at the same time more manure than before was needed in his increasingly intensive farming.¹¹⁶ Also, enlarged crops of rice throughout Japan tended, except in years of famine, to check the price of this cereal, which the farmer sold, from advancing in proportion to the continual adulteration of coins and rise of prices of other things, which he bought.¹²⁴ Unfortunately, too, there was little outside market to which surplus rice could be exported, for Japan's door was closed almost totally against foreign trade. Nor should it be forgotten that so long as the principal form of agricultural labor remained manual, the very limit of the working capacity made an indefinite expansion of the cultivated area a physical impossibility. Small as was the average landed estate in Japan, it seemed in general to have been even too large for the holding peasant to manage.¹²⁵ It is highly interesting to see that this fundamental condition served to make Japan persist as a country of essentially small farming, in spite of the universal need for more wealth. This condition not only tended to limit the size of the estate of the average peasant, but also, together with the taxes too

high in relation to the rent, made it an unprofitable investment for the rich to enlarge their landed properties.¹²⁶ This natural equilibrium was only the more strongly insured by the restrictions imposed by law upon the alienation of land.

The selling and mortgaging of land was, indeed, a necessity for the penurious peasant. The authorities, in their anxiety to prevent aggrandisement by the rich few, forbade a permanent sale of old land, and restricted mortgage.¹²⁷ However, "without free sale of land," wrote Tanaka Kyūgu, about 1720, "what province or what district, whether in a fief or in a domain land, would be able to pay all its taxes?" Mortgages often meant permanent transfers, and always were attended with high rates of interest. Hence, illicit or specially permitted sales were effected under all conceivable devices to elude the law.³⁶ It should not be imagined, however, that the peasant cheerfully parted with his hereditary holdings of land. On the contrary, few things were done more reluctantly than this extreme measure, which deprived the farmer of the only material basis of his humble status, lowered him in the eyes of his neighbours, and disgraced him in the memory of his ancestors. Thus the peasant struggled on between his family pride and his penury, and between the restrictions of sale and mortgage and the forced necessity of modest livelihood. The general tendency among the rural population was not towards a greater inequality, but towards a continual change of fortune within limited bounds.

The loss of the peasant estate was liable to be followed by more regrettable circumstances. While the poor peasant might be hired by a more fortunate neighbour as farm-hand, he oftener chose to migrate to a city and take service under a warrior or a merchant, for it would give him a higher wage with less labor than on the farm. When he returned, he would have acquired the speculative point of view and the extravagant habits that ruled in the larger cities. He thus carried about him a certain restless and flippant air, and the half-exhausted inhabitants of the village contained elements susceptible exactly to this sort of influence. Soon every part of the country came to feel a longing for easy money and easy life. From the end of the seventeenth century, the supply even for menial service in the warrior's or merchant's household was growing

scarce. In order to remedy this difficulty, the authorities, who in the earlier years had taken great pains to forbid sales of persons and to limit the terms of personal service, were now obliged to modify the law to a considerable extent.¹²⁸ Every district, if not every village, contained landless persons who would live rather by speculation, trading on popular superstitions, contracts, gambling, fraud, or robbery, than any from of honest labor.¹²⁹ Especially, provinces near Edo were infested with the most desperate classes of brigands.¹³⁰

These dangerous elements in the rural population made themselves felt in years of famine. They led or joined discontented peasants, hundreds or thousands of whom would rise in mobs, as it often happened in different parts of Japan, and everywhere in 1787—8, and destroy and rob merchants' establishments and demand radical changes of prices. As was characteristic with uneducated peasants, they were on these occasions extremely foolhardy, coarse and cruel, but, when confronted with strong armed forces, broke down abruptly.¹³¹ It was in order to prevent these events that good rulers filled public granaries in ordinary years, and in famines opened them and fed poor peasants on generous scales.¹³² A success of these measures was always considered a mark of wise rural administration, for it was tacitly understood that the people should not be expected to be able to provide for their own needs in hard years.

Riots took place only at unusual times. What was of continual occurrence in all parts of Japan from the beginning to the end of the Tokugawa period was the desertion of the impoverished peasant of his ancestral home and hamlet. In ordinary years, the estate of the runaway would be cultivated and its taxes paid by his relatives or village,^{33, 40} but at every slight increase of hardship such large numbers would abscond that, despite the rigorous laws of the joint responsibility of the village, much cultivated land would be laid waste, or at best be thrust into unwilling hands and decline in productivity. A literal enforcement of law would only increase the number of runaways. Nothing is more significant of the rural government under the Tokugawa than this subject of the desertion of the peasant.¹³³

The peasant wishing to run away was apt to find a ready solution of his problem in the multiplicity of land tenures that

prevailed in feudal Japan. There were, besides the estates of civil nobles and of religious institutions, the suzerain's domain lands, the baron's fiefs, and lands apportioned to some of their vassals, with a great diversity of financial laws and customs.¹³⁴ The deserter from a fief might pass into a domain land, as it often took place, or the reverse. He might also pass from the baron's own land to land held by one of his vassals. It was not uncommon that a vassal's land was situated adjacent to, or even in the same village with, a holding of his lord. A destitute peasant in the latter would either in some manner transfer the title over what little patches of land still remained in his hands to a person in the vassal's territory, preferably to its manager, who was generally regarded one of the most sinful of all men, or else himself move into the territory. The process of removal might also be reversed, according to the circumstance.

One remarkable fact in the economic history of this period is the apparently slow increase of population beside a great extension of the area of cultivated land. The latter increased from perhaps 5000000 in 1600 to more than 11500000 acres at the end of the régime,¹²³ while the former rose from 26060000 in 1721 to only 26900000 in 1847.¹³⁵ Allowing for the probable inexactness of the official statistics,¹³⁶ it is worthy of note that, after the middle of the eighteenth century down to 1867, cases of considerable increase of population in the provinces are rarely met with.¹³⁷ Evidently the terrible famines which visited Japan repeatedly at the end of the eighteenth and the beginning of the nineteenth century decimated the people.¹³⁸ For under no condition would an isolated agricultural community be so helpless as under a universal failure of crops and famine. Yet it is striking that the nation should have been so slow, as it was, to recuperate. The successive famines reducing the population raised the wages, it was complained, but the natural equilibrium which should be expected did not follow. In a few fiefs, the population slowly increased between the famines and the end of the period, but their taxable population actually decreased.¹³⁹ An explanation would suggest itself that it was the small land-holding peasantry, rather than the total population, that did not increase. It has already been shown that circumstances led peasants in many places to have recourse to illicit

sales and mortgages, to menial service to the merchant and warrior classes, to irregular modes of life, and to desertion. Not a few turned peddlers and petty merchants, much against the policy of the government,⁷⁰ and thereby created more intermediate steps between the producer and consumer, raising prices and producing nothing.

There were not absent certain forces that counteracted the tendency of the taxable population to remain stationary. Among these may be mentioned the conscious measures adopted in many districts to increase their peasant population, either by generally good administration, by forbidding infanticide and giving bounties for births, by inducing people of other classes and districts to settle down as farmers, or by encouraging the opening of hitherto uncultivated land.¹⁴⁰ Besides, the laws restricting changes of residence and sales of land, the high taxes of land discouraging aggrandisement by the rich, the general economic conditions still too little advanced to make the comparative disadvantage of the agricultural occupation overwhelming, and, also, the tenacious family institutions breeding conservative views of life,—these circumstances, too, must have tended to make the peasant think twice before abandoning his status. In the main, however, nothing could resist the two mighty forces that silently but surely carried the régime to its destiny. The first was the fundamental question of land *versus* population. If the average rice-land, such as formed the basis of taxation under the Tokugawa, was capable of supporting the population, at the rate of one person on every one and a quarter acres,¹⁴¹ it would have taken thirty million acres, instead of the five to eleven and a half millions of the cultivated area during this period,¹²³ to maintain Japan's rural population of about twenty-four million souls. The actual rate was only one half acre per head.¹⁴² It is true that potatoes, oranges, grapes, cotton, and a few other crops more valuable than rice were raised in some districts, but these were, except the first, purely local, and their cultivation was generally not allowed to encroach upon that of rice. It is also true that the government was alive to the danger of over-population, and forbade indefinite divisions of estates,^{36 & 45} but this measure created undesirable social conditions among the younger sons of the peasant.¹⁴³ It must be admitted, too, that the peasant family could and

usually did undertake the silk-culture and other secondary occupations, and, indeed, these were the saving elements of the rural life. Nevertheless, one can hardly avoid the general conclusion that the Japan under the Tokugawa contained a population as large, if not too large, as could be supported by her intensive agriculture.

The second fundamental question was the productive power of the soil *versus* the expenditures of the government, the latter increasing and the former relatively decreasing though perhaps absolutely increasing.¹⁴⁴ The economics of the nation were inadequate to support the finances of the State. One has but to remember with what unceasing effort, though with ultimate failure, the paternal rulers strove to bridge the widening gap with the labor of the peasant, whom they caressed, exhorted, threatened, and wearied.

In conclusion, let us, from the historical point of view, suggest a few other lines of criticism of the régime than have already been touched upon. One may attempt to judge the merit of a movement by comparing its final results with its original objects. Ask, therefore, if the ingenious and elaborate polity of the Tokugawa, so far as it concerned village administration, succeeded in attaining its primary object: namely, to secure the submission and the contentment of the peasant population to a degree that it would cheerfully and without friction contribute the fruits of its labor to the maintenance of the warrior class, and to the perpetuation of the power of the Tokugawa.

To this general question no impartial student would hesitate to return an affirmative answer. It was nothing short of genius in statesmanship that wove the great fabric of the Tokugawa government; it completely overwhelmed the lawless elements of which the Japan of the seventeenth century was full, and continued without serious interruptions to exercise an almost absolute control over national affairs during the rule of fifteen successive suzerains. The profound peace thus brought about enabled a large part of Japan's arable land to be turned to cultivation, numerous arts and industries to be built up, and a highly diversified civilization to be developed

and diffused among the people. If this wonderful régime failed to prevent the rise of certain evils, they would be found to have been largely due to the fact that the government was essentially feudal, and that it had to be built upon the existing conditions of the family and society. Nor did the evils harm any one so much as they did the suzerain's own government.

It would, however, be unjust to ignore the evils, even if we lay aside the question how much they were within the moral control of the suzerain. They were many, and some of them have been of immense magnitude. To be brief. Just as the suzerain's policy toward the feudal classes had subdued them at the cost of their true vigor and their genuine loyalty to himself, so his control of the peasants stifled their enterprise, limited their wealth, and levelled down their conditions. If they did not rise in a general revolt, it was because they were thoroughly deprived of not only the opportunity, but also the energy, to protest. When at last the national crisis came in the middle of the nineteenth century, just as the feudal classes chose to make no serious effort to defend the waning power of the Tokugawa, but, on the contrary, furnished men to efface it, so the peasants, also, proved surprisingly indifferent. The great Revolution was begun and consummated by discontented warriors, with the rural population too weary and too meak to lift a finger in the cause of their own liberation. It has been said that the great reform was accomplished without a drop of the peasants's blood being shed, but the fact does not reflect honor upon them. They are still largely passive under the new rights¹⁴⁵ that have been heaped upon them. What has been training them since the Revolution is not so much their new political power, for as yet hardly one in every forty farmers has a vote,¹⁴⁶ as the national system of education, their amalgamation with the other classes of society, which is growing apace, and the object lessons in public interest taught by the stirring events that have transpired about them in the East.

If, however, the peasant has emerged from the feudal régime with little added wealth and energy, he has also inherited from it two important legacies: a moderate but secure holding in land, and a wonderful capacity for discipline. These are the great material and moral debts of the new age to the old. History will probably tell of what immense value the heritage has been for the upbuilding of a steady and collected nation.

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18. *Kei-zai mon-dō hi-roku*, 經濟問答秘錄, [notes on local administration], by ? Shōzhi Kōki?, 正司考祺, Nagasaki, 1833? 35 bks. in 31 vols. (o. s.), 1135 leaves.

Not always reliable.

19. *Notes on land tenure and local institutions in Old Japan*, edited from posthumous papers of Dr. D. B. Simmons, by Prof. John Henry Wigmore. In the *Transactions of the Asiatic Society of Japan*, vol. 19, part I, pp. 37—270.

20. *KEN-KYŌ RUI-TEN*, 憲教類典, [documents relating to the Tokugawa government, classified], compiled by Kondō Morishige, 近藤守重 (1773—1829). Manuscript. 5 parts, 147 bks.

The authenticity of some of the documents is in doubt.

21. *TOKUGAWA KIN-REI KŌ*, 德川禁令考, [laws of the Tokugawa government], compiled by the Department of Justice. Tokyo, 1878—95. In 2 series. Series I, edicts and orders, in 6 vols., 444, 506, 749, 622, 746, 660 pages. Series II, penal laws and laws of equity, in 4 vols., 676, 772, 818, ? pages.

The penal part of Series II is in substance the *KWA-JŌ RUI TEN*. See Note 47, below.

22. *KWA-JŌ RUI-TEN HON-MON*, 科條類典本文, [edicts and notes relating to penal law and administration of criminal justice], compiled by order of the suzerain, in 1742. Edited by Tokyo University, 1881. 2 vols., 131, 190 pages.

This is the main text of the *KWA-JŌ RUI-TEN*, which was an enlarged edition of the *KU-ZHI-KATA O-SADAME-GAKI* compiled in 1742, and, therefore, it is presumed that the present work is identical with the latter. See Note 47, below.

23. *KEN-PŌ BU-RUI* 憲法部類, [notes and orders relating to details of government]. Anonymous. Manuscript. 10 vols. (o. s.)

24. *RUI-REI HI-ROKU*, 類例秘錄, [orders and precedents relating to penal law], compiled by Ōno Hiroki, 大野廣樹 (d. 1841). Manuscript. 10 vols. (o. s.)

25. *GEN-PI ROKU*, 嚴秘錄, [notes on judicial business]. Anon. Manuscript. 1 vol. (o. s.)

26. *RITSU-REI DAI HI-ROKU*, 律令大秘錄, [notes on penal law and details of official business], compiled by (?) Ōno Hiroki. Manuscript. 11 vols. (o. s.)

27. *BUN-DEN SŌ-SHO*, 聞傳叢書.

The same as the above.

28. *KU-ZHI KATA YŌ-REI*, 公事方要例, [notes on judicial business at the suzerain's high court]. Anon. Manuscript. 4 vols. (o. s.)

29. *GO-TŌ-KE REI-JŌ*, 御當家令條, [edicts and orders, and customs, of the Tokugawa government]. Anon. Manuscript. 36 vols. (o. s.)

30. *KŌ-SAI ROKU*, 公裁錄, [orders and notes relating to official business]. Anon. Manuscript. 8 vols. (o. s.)

31. *ON TOME-GAKI* 御留書.

The same as the above, with alterations in the last part.

32. *RITSU-REI ROKU*, 律令錄, [orders of the suzerain's government, 1764—1846]. Anon. Manuscript. 8 vols. (o. s.)

33. *JI-KATA KŌ-SAI ROKU*, 地方公裁錄, [orders and precedents regarding to village administration in the suzerain's domain land]. Anon. Manuscript. 7 vols. (o. s.)

34. *KŌ-SAI HIKKI SEI-ZAN HI-ROKU*, 公裁筆記青山秘錄, [private notes on judicial business]. Anon. Manuscript. 5 vols. (o. s.)

35. *GO-KATTE-GATA O-SADAME-GAKI NARABI NI UKA-GAI NO UE ŌSE-WATASARE-GAKI* 御勝手方御定書并伺之上被仰渡書, [orders and notes relating to the financial administration of the domain lands]. Anon. Manuscript. 1 vol., 257 leaves.

36. *TOKUGAWA ZHI-DAI MIN-ZHI KWAN-REI SHŪ*, 徳川時代民事慣例集, [laws and precedents relating to civil matters during the Tokugawa period], compiled by officials of the Department of Justice. No date. Manuscript, copied from the original kept in the archives of the Department. 11 vols., 2458 leaves.

37. *Min-zhi kwan-rei rui-shū*, 民事慣例類集, [customs relating to civil affairs in the last years of the Tokugawa rule, collected through oral testimonies given by old people], by special commissioners of the Department of Justice despatched to all the larger sections of Japan Proper, 1877. 1 vol., 597 pages.

38. *Materials for the study of private law in old Japan*, with notes and an introduction, by Professor John Henry Wigmore. In the *Transactions of the Asiatic Society of Japan*, vol. 20, supplement, parts I, II, III, and V, Tokyo. 1892, 203+41, 138, 426+17, 112 pages.

Largely based upon the two works mentioned above. Highly valuable, but unfortunately not yet completed.

39. *SUI-CHIN ROKU*, 吹塵錄. [laws and notes, relating mainly to financial matters, of the Tokugawa period], compiled, at the request of the Department of Finance, by the late Count Katsu Awa. 勝安房 (1823—99). Tokyo, [1890]. 35 bks. in 2 vols., 1187, 1270 pages.

40. *SUI-CHIN YO-ROKU*, 吹塵餘錄. [sequel to the above], by the same. Tokyo. 1890. 10 bks. in 1 vol., 901 pages.

41. *KWA-HEI HI-ROKU*, 貨幣秘錄, [secret memorandum on currency], prepared by some authority, about 1842. In the *On-chi sō-sho* 溫知叢書 series, (12 vols., Tokyo, 1891), vol. 5, pp. 1—45.

42. *Yu-ri Kō-sei*, 由利公正, [life of Yuri Kōsei, 1829—1909] by Haga Hachiya, 芳賀八彌. Tokyo, 1902. 1 vol., 325+58 pages.

Contains an account of the Tokugawa system of currency.

43. *Sō chō kō*, 租稠考, [brief history of taxation in Japan], by Miura Chiharu, 三浦千春. Nagoya, 1869. 1 vol. (o. s.)

Not always reliable.

44. *Dai Nihon so-zei shi*, 大日本租稅志, [history of Japanese taxation till 1880], compiled by Nonaka Hitoshi?, 野中 道, and others, of the Department of Finance. Tokyo, [1885]. 30 vols. (o. s.)

This is a convenient compilation, but contains errors.

45. *Den-so en-kaku yō-ki*, 田租沿革要記, [brief history of the land-tax in Japan], by Kōda Shisei, 幸田 思成, of the same Department. Tokyo, 1896. 1 vol. (o. s.) Contains *Koku-daka kō*, 石高考, and errata of the *Dai Nihon so-zei shi*.

46. *DEN-SEI HEN*, 田制篇, [excerpts from sources and literature relating to land and taxation], compiled by Yokoyama Yoshikiyo, 横山 由清, of the former Gen-rō-in. Tokyo 1883. 11 vols. (o. s.)

To be used with caution.

47. *Den-en rui-setsu*, 田園類說, [notes on land and taxation], by Komiyama Mokunoshin, 小宮山 奎進 (early 18th century), and revised and augmented by Tani Motonori, 谷本 教 (d. 1752), Ōishi Hisayoshi?, 大石 久敬 (d. 1797), and Yamauchi Tadamasa?, 山内 董正, 1842. In the *Zoku-zoku gun-sho rui-zhū* 續續群書類從 series, VII., (Tokyo, 1907). 267—354.

48. *Ji-kata han-rei roku*, 地方凡例錄, [treatise on the taxation and rural administration of the suzerain's domain lands], compiled by Ōishi Hisayoshi?, 1794. 2 copies. (1) Revised edition by Ōkura Gi?, 大倉 儀, 1886. 11 vols. (o. s.). (2) Manuscript. 11 vols. (o. s.)

Citations in the Notes are from (1), its numerous misprints being checked with (2).

49. *Ji-kata ochi-bo shū*, 地方落穂集, [notes on financial administration of the domain lands], by Yasumichi?, 泰路. Revised by Ōtsuki Tadaoki. 大月忠興. Tokyo, 1870. 14 vols. (o. s.)

50. *Ji-kata tai-gai shū*, 地方大概集, [ditto], by Katō Takabumi, 加藤高文. Ōsaka, 1874. 2 series, 8 vols. (o. s.)

51. *Ji-kata kō-shō roku*, 地方工匠錄, [practical notes on public works in the domain lands]. Anon. Manuscript. 1 vol., 146 leaves.

Many illustrations and accounts.

52. *Ji-KATA-GAKARI ATSUKAI-HŌ SHŪ-SEI*, 地方係扱法集成, [practical notes on financial administration]. Anon. 1796. Manuscript. 4 vols. (o. s.)

53. *ON TORI-KA KOKORO-E GAKI*, 御取箇心得書, [practical notes on taxation in the domain lands], copied by one Miyasaka. 宮坂. Manuscript. 2 vols. (o. s.)

54. *BAN-SHŪ GO NEN-GU MAI OSAME-HARAI KA-SHI NO DE-YAKU CHŪ GO-YŌ TOME*, 播州御年貢米納拂河岸之申役中御用留, [documents relative to transporting tax-rice from Harima to Ōsaka, in 1831]. Manuscript. 1 vol. (o. s.)

55. *BAN-SHŪ GO NEN-GU GO KWAI-MAI IKKEN*, 播州御年貢御廻米一件, [documents relative to transporting tax-rice from Harima to Edo, in 1833]. Manuscript. 2 vols. (o. s.)

56. *Ta-hata ken-mi on tori-ka shi-tate hō*, 田畑檢見御取箇仕立法, [practical notes on assessing taxes and making accounts], by Kobayashi Tetsuzhirō, 小林鉄次郎, of the financial department of the suzerain's government, 1848. Manuscript. 1 vol. (o. s.)

57. *Wata ken-mi shi-yō chō*, 己々檢見仕様帳, [notes on measuring the productive power of cotton-land in Yamato, Settsu, Kawachi, and Idzumi], compiled by Ōno Chū-sai, 大野忠齋. No date. Manuscript. 1 vol. (o. s.)

58. *Chi-so kai-sei hō-koku sho*, 地租改正報告書, [report to the Prime Minister Sanjō on the reform of the land-tax], by (now Marquis) Matsukata Masayoshi, 松方正義, then Minister of Finance. Tokyo, 1882. 1 vol., 197 pages.

59. *Fu-ken chi-so kai-sei ki-yō*, 府縣地租改正紀要, [reports of the three Cities and thirty-six Prefectures on the change of the land-tax], compiled by the Department of Finance. Tokyo, [1882?]. 1 vol., 39 sections.

60. *Go-nin-gumi sei-do no ki-gen*, 五人組制度の起源, [on the origin of the five-man group system], by Prof. Miura Shūkō?, 三浦岡行. The *Hō-ri ron-sō* 法理論叢 series, No. 9. Tokyo, 1900. 1 vol., 83 pages.

60a. *Go-nin-gumi sei-do*, 五人組制度, [on the five-man group system], by Prof. Hodzumi Nobushige?, 穂積陳重. The same series. No. 11. Tokyo, 1902. 1 vol., 241+38 pages.

61. *GO-NIN-GUMI CHŌ I-DO BEN*, 五人組帳異同弁, [parallel articles of several five-man group records], compiled by the Department of Justice. Tokyo, 1884. Manuscript, copied from the original in the Department archives. 1 vol., 120 leaves.

62. *MURA SHŌ-YA KOKORO-E BEKI JŌ-JŌ*, 村庄屋可心得條條, [general instructions to village-heads], by the government of Kyōto, 1869. 1 vol. (o. s.)

63. *MURA SHŌ-YA TOSHI-YORI YAKU KOKORO-E BEKI JŌ-JŌ*, 村庄屋年寄役可心得條條, [general instructions to village-heads and village-chiefs], by the government of Ōsaka, 1872. 1 vol. (o. s.)

64. *Ō-SHŌ-YA YAKU KOKORO-E BEKI JŌ-JŌ*, 大庄屋役可心得條條, [general instructions to district-heads], by the government of Ōsaka, 1872. 1 vol. (o. s.)

65. *GUN-CHŪ-SEI-HŌ*, 郡中制法, [general instructions to peasants], by the government of Kyōto, 1869. 1 vol. (o. s.)

These four works are interesting as survivals in early years of the new era of the old method of village government.

66. *BI-HAN TEN-KEL*, 備藩典刑, [orders of Ikeda Mitsumasa, 池田光政, lord of Okayama 1642—71], compiled by Yuasa Zhō-zan, 湯淺常山 (1708—81). Manuscript. 4 vols. (o. s.)

67. *BI-HAN TEN-ROKU*, 備藩典錄, or, *YŪ-HI ROKU*, 有斐錄, [life and laws of Ikeda Mitsumasa], by Mimura Nagatada, 三村永忠. No date. Manuscript. 1749. 4 vols. (o. s.)

68. *Tsugaru Nobumasa kō*, 津輕信政公, [life of Tsugaru Nobumasa, lord of Hirosaki 1646—1710], by Tozaki Satoru, 外崎覺. Tokyo, 1902. 1 vol., 362 pages.

69. *En-kyō fū-setsu shū*, 延享風説集, [rumors about Matsudaira Norimura, 松平乗邑, lord of Sakura and councillor to the suzerain 1723—45]. Anon. Manuscript. 1 vol. (o. s.)

Gossipy.

70. *Gin-dai i-zhi*, 銀臺遺事, [notes on the life of Hosokawa Shigekata, 細川重賢, lord of Higo and Bungo, 1718—85]. Anon. Manuscript. 4 vols. (o. s.)

71. *YŌ-ZAN KŌ SEI-KI*, 鷹山公世紀, [life of Uesugi Harunori, 上杉治憲, lord of Yonezawa, 1751—1822], compiled by Ikeda Nariaki?, 池田成章. Tokyo, 1906. 1 vol., 1056 pages.

72. *NOZOKI TAI-KWA Ō*, 荏戸太華翁, [life and writings of Nozoki Yoshimasa, 荏戸善政, 1735—1803 twice councillor to Uesugi Harunori], compiled by Suibara Ken?, 杉原謙. Tokyo, 1898. 1 vol., 926+84 pages.

73. *U-YŌ SŌ-SHO*, 羽陽叢書, [writings of Uesugi Harunori, with notes on his life], compiled by Yaoita Bai-setsu, 矢尾板梅雲, Nozoki Tai-kwa, Hara Raku-zan, 原樂山, and Asaoka Nan-koku, 朝岡南谷. Yonezawa, 1879—83. 3 series, (*kan-tō*, *gyō-so*, and *sei-toku*), in 6 vols. (o. s.)

Largely superseded by the last two works.

74. *Uesugi Yō-zan kō*, [life of the same lord], by Kawamura Makoto?, 川村惇. Tokyo, 1893. 1 vol., 364 pages.

75. *Sei-zan kan-wa*, 青山閑話, [notes on the life of Hosoi Hei-shū, 細井平洲, once tutor and councillor to the same lord]. Anon. Manuscript. 1 vol. (o. s.)

76. *Shirakawa Raku-ō kō to Tokugawa zhi-dai*. 白河樂翁公と徳川時代, [life and times of Matsudaira Sadanobu, 松平定信, lord of Shirakawa and councillor to the suzerain, 1759—1829], by Professor Mikami Sanzhi, 三上參次. Tokyo, 1891. 1 vol., 198 pages.

77. *Egawa Tan-an*, 江川垣庵, [life of Egawa Tarozaemon, hereditary intendant of Nirayama, Idzu, 1801—55], by Yada Shichitarō, 矢田七太郎. Tokyo, 1902. 1 vol., 243 pages.

78. *KWAI-KYŪ KI-ZHI*, 懷舊紀事, [life of Abe Masahiro, 阿部正弘, lord of Fukuyama, once chief councillor to the suzerain, 1819—58], compiled by Hamano Shōkichi, 濱野章吉. Tokyo, 1899. 1 vol., 872+157 pages.

79. *Gei-han san-zhū-san nen roku*, 藝藩三十三年錄, [an account of the financial experiences of the Hiroshima fief between 1833 and 1863], by Kotakagari Gen-gai?, 小鷹狩元凱. Tokyo, 1893. 1 vol., 184 pages.

80. *Hiroshima Mō-gyū*, 廣嶋蒙求, [stories from the Hiroshima fief], by the same author. Tokyo, 1905. 1 vol., 139 pages.

81. *AIDZU KYŪ-ZHI ZAKKŌ BASSUI*, 會津舊事雜考拔萃 [documents and notes relating to Aizu, being an abridgement of the *AIDZU KYŪ-ZHI ZAKKŌ*, compiled by Mukai Yoshishige, 向井吉重, 3 vols.]. Dated 1662. Manuscript. 1 vol. (o. s.)

82. *ON KE-MI TE-TSUDZUKI*, 御毛見手續, [how to measure the productive power of land, in the Okayama fief]. Anon. No date. Manuscript. 1 vol. (o. s.)

83. *DAI-ZEN ON KE-MI YŌ-SHŪ*, 大全御毛見用集, [guide to measuring the productive power of land, in the same fief]. Anon. No date. Manuscript. 1 vol. (o. s.)

84. *SEN-DAI HAN SO-ZEI YŌ-RYAKU*, 仙臺藩租稅要略, [documents relating to the financial administration of the Sendai fief], edited by Yamada Ki-ichi, 山田揆一, of the prefectural government at Sendai. [Sendai, 1888]. 5 vols., 255 leaves.

85. *Shū-gi wa-sho*, 集義和書, [notes on philosophy, ethics, and politics], by Kumazawa Ban-zan, 熊澤蕃山 (1619—91). 16 bks. In the *Ni-hon rin-ri i-hen* 日本倫理彙編 series, (10 vols., Tokyo, 1901—03), I, 255—600.

86. *Shū-gi gwai-sho*, 集義外書, [sequel to the above], by the same author. 16 bks. In the same series, II, 9—332.

87. *Min kan sei-yō*, 民間省要, [notes on rural administration], by Tanaka Kyūgu-emon Nobuyoshi? 田中休愚右衛門喜吉. Prefaces dated 1720 and 1721. Manuscript. 2 series, 7 and 8 vols. (o. s.)

Fearless criticisms by a practical administrator of the rural government of domain lands. The work attracted the attention of the wise suzerain Yoshimune, who gradually raised the author to the position of intendant. See *To*, XIII, 962, XIV, 278.

88. *Kei-zai roku*, 經濟錄, [views on government], by Dazai Shun-dai, 太宰春臺 (1680—1747), 1729. Manuscript. 10 vols. (o. s.)

Thoroughly Confucian.

89. *Shun-dai zatsu-wa*, 駿臺雜話, [miscellaneous notes on history, morals, and literature], by Muro Kyū-sō, 室鳩巢 (1658—1734), 1732. 5 bks. In the *Ni-hon rin-ri i-hen* series, VII. 81—309.

90. *Sō-bō ki-gen*, 草茅危言, [political and social criticisms], by Nakai Chiku-zan, 中井竹山 (1730—1804), 1789. Kyōto, 1868. 5 vols., 280 leaves.

91. *Byō-kan chō-go*, 病間長語, [miscellaneous notes], by Inoue Kin-ga, 井上金峨 (1733—84). In the *On-chi sō-sho* series, XI, 70 pages.

92. *Ama no taku mo*, 蜃の焼く藻, [miscellaneous notes], by Morikawa Takamori 森川孝盛, c. 1790. In the same series, XI, 122 pages.

93. *Ō-mei-kwan i-sō*, 嚶鳴館遺草, posthumous ethico-political works by Hosoi Hei-shū, once tutor to Uesugi Harunori and other barons, (1728—1801). 6 bks. In the *Ni-hon rin-ri i-hen* series, IX. 9—161.

Good examples of the great influence of Confucian ideas on rural government.

94. *Hō-toku gwai-roku*, 報德外錄, views by Ninomiya Takanori (Son-toku), 二宮尊德 (1786—1856), compiled by his pupil Saitō Takayuki, 齋藤高行. 2 bks. In the same series, X. 397—439.

95. *Ninomiya sen-sei go-rui*. 二宮先生語類, sayings of Ninomiya Takanori, compiled by the same pupil. 4 bks. In the same series, X. 440—542.

96. *Chi-so ron*, 地租論, [on the land-tax and its relation to the life of the peasantry], by the late Fukuzawa Yukichi, 福澤諭吉, about 1893. In the *Fukuzawa Yukichi zen-shū* (全集), V.

97. *Hō-sei ron-san*, 法制論纂, [seventy-eight essays and addresses on the institutional history of Japan by various scholars], edited by the Koku-gaku-in, 國學院. Tokyo, 1903. 1 vol., 1446 pages.

98. *Hō-sei ron-san zoku-hen* (續編), [sequel to the above, containing fifty-seven more essays and addresses], edited by the same. Tokyo, 1904. 1 vol., 914 pages.

99. *Tokugawa sei-kyō kō*, 德川政教考, [evolution of political-philosophical ideas during the Tokugawa period], by Prof. Yoshida Tō-go, 吉田東伍. Tokyo, 1894. 2 vols., 206, 212 pages.

100. *Dai Ni-hon chi-mei zhi-sho*, 大日本地名辭書, dictionary of Japanese historical geography, by the same author. Tokyo, 1900—07. 4 vols., cxxxiv + 288 + 4752 pages.

101. *Koku-shi dai zhi-ten*, 國史大辭典, [dictionary of Japanese history], by Yashiro Kuniji?, 八代國治, Hayakawa Zhunzaburō, 早川純三郎, and Inobe Shigewo, 井野邊茂雄. Tokyo, 1908. 2 vols., 2390 and 220 pages.

102. *Shi-gaku zasshi*, 史學雜誌, [monthly journal devoted to history]. Tokyo, 1890—.

Abbreviations.

The following abbreviations are used in the Notes for those works which receive frequent reference. Two capitals, (for example, 'BR'), are used for each old work which consists primarily of sources; a capital and a small letter, (for example, 'Mi'), for each old secondary authority; three capitals, (for example, 'DSR'), for each recent work consisting mainly of sources; and a capital and two small letters, (for example, 'Hrs'), for each recent secondary authority.

AI	81. AIDZU KYU-ZHIZAK-KO BASSUI.	Ggs	60a. Go-nin-gumi sei-do.
BG	55. BAN-SHU GO KWAI-MAI . . .	Gi	70. Gin-dai i-zhi.
BK	66. BI-HAN TEN-KEI.	GK	35. GO KATTE-GATA O SADAME-GAKI.
Bms	6. Baku-matsu shi.	GS	65. GUN-CHU SEI-HO.
BO	54. BAN-SHŪ . . OSAME-HARAI . . .	Gsr	79. Gei-han san-zhū-san nen roku.
BR	67. BI-HAN TEN-ROKU.	GT	29. GO TO-KE REI-JŌ.
Chk	58. Chi-so kai-sei hō-koku sho.	Hmg	80. Hiroshima mō-gyū.
Chr	96. Chi-so ron.	Hrs	97. Hō-sei ron-san.
Dch	100. Dai Ni-hon chi-mei zhi-sho.	Hrz	98. Hō-sei ron-san zoku-hen.
De	47. Den-en rui-setsu.	Ht	94. Hō-toku gwai-roku.
DKM	1. DAI NI-HON KO-MON-ZHO.	JG	52. JI-KATA-GAKARI A-TSUKAI-HO SHU-SEI.
DNR	7. DAI NI-HON NO-SEI RUI-HEN.	Jh	48. Ji-kata han-rei roku.
DNS	8. DAI NI-HON NO SHI.	JK	33. JI-KATA KŌ-SAI RO-KU.
Dns	44. Dai Ni-hon so-zei shi.	Jk	51. Ji-kata kō-shō roku.
DO	83. DAI-ZEN ONKE-MI....	Jo	49. Ji-kata ochi-bo shū.
Dse	45. Den-so en-kaku yō-ki.	Jt	50. Ji-kata tai-gai shū.
Dsg	10. Dai Ni-hon san-gyō zhi-seki.	KB	23. KEN-PO BU RUI.
DSH	46. DEN-SEI HEN.	KH	41. KWA-HEI HI-ROKU.
DSR	2. DAI NI-HON SHI-RYŌ.	KK	20. KEN-KYO RUI-TEN.
En	69. En-kyō fū-setsu roku.	KKK	78. KWAI-KYU KI-ZHI.
Eta	77. Egawa Tan-an.	Km	18. Kei-zai mon-dō hi-roku.
Fuk	59. Fu-Ken chi-so kai-sei ki-yō.	KR	22. KWA-JO RUI-TEN HON-MON.
GGI	61. GO-NIN-GUMI CHO I-DŌ BEN.	KRE	11. KO-ZHI RUI-EN.
Ggk	60. Go-nin-gumi sei-do no ki-gen.	Ksd	101. Koku-shi dai zhi-ten.
		Kw	16. Kwan-nō waku-mon.
		KY	28. KU-ZHI-KATA YŌ-REI.
		Kz	88. Kei-zai roku.
		Mi	87. Min-kan sei-yō.
		MK	62. MURA SHO-YA . . . KYOTO.

Mkr	37. Min-zhi kwan-rei rui-shū.	Shr	76. Shirakawa Raku-ō kō
MO	63. MURA SHŌ-YA OSAKA.	Shz	102. Shi-gaku zasshi.
Ng	12. Nō-gyō zen-sho.	Smw	19. Simmons-Wigmore, Notes
Ngh	14. Nō-gyō hon-ron.	Sw	85. Shū-gi wa-sho.
Nn	95. Ninomiya sen-sei go-rui.	Tbf	5. Tokugawa baku-fu zhi- dai shi.
Nns	9. Ni-hon nō-gyō shō-shi.	Tk	15. Tokugawa baku-fu ken- ji yō-ryaku.
NTK	72. NOZOKI TAI-KWA Ō.	TKR	21. TOKUGAWA KIN-REI KŌ.
Ny	13. Nō-gyō yo-wa.	TMK	36. TOKUGAWA MIN-ZHI KWAN-REI SHU. z zhin-zhi hen, d dō-san hen, f fu-dō-san hen, s so-shō hen.
Nz	17. Nō-sei za-yū.	Tnk	68. Tsugaru Nobumasa kō.
OK	82. ON KE-MI TE-TSU- DZUKI.	To	3. Tokugawa zhikki.
Om	93. Ō-mei-kwan i-sō.	Tsk	99. Tokugawa sei-kyō kō.
OO	64. Ō-SHŌ-YA OSAKA.	Tt	56. Ta-hata ken-mi
OT	53. ON TORI-KA KOKO- RO-E GAKI.	US	73. U-YŌ SŌ-SHO.
RD	26. RITSU-REI DAI HI- ROKU.	Uyz	74. Uesugi Yō-zan kō.
RH	24. RUI-REI HI-ROKU.	Wa	57. Wata ken-mi . . .
RR	32. RITSU-REI ROKU.	Wig	38. Wigmore, Materials
Sb	90. Sō-bō ki-gen.	YZS	71. YŌ-ZAN KŌ SEI-KI.
SCR	39. SUI-CHIN ROKU.	Zo	4. Zoku Tokugawa zhikki.
SCY	40. SUI-CHIN YO-ROKU.		
Sd	89. Shun-dai zatsu-wa.		
SDS	84. SEN-DAI HAN SO-ZEI YO-RYAKU.		
Sg	86. Shū-gi gwai-sho.		

(Note: The Notes accompanying this article will appear in a subsequent number of the Journal.)

Complete Induction for the Identification of the Vocabulary in the Greek Versions of the Old Testament with its Semitic Equivalents: Its Necessity and the Means of obtaining it.—By MAX L. MARGOLIS, Philadelphia, Pa.

(NB. The sigla for the Septuagint codd. are, in the book of Genesis, those of the larger Cambridge edition; for the other books, those of Swete's manual edition or those used in his *Introduction*: the figures refer to manuscripts in the edition of Holmes-Parsons. Λ = Lucian. The abbreviations of the Biblical books are for the most part the same as in the Oxford Concordance.)

THE first of the canons laid down by the **The first Lagar-**
noted Septuagint scholar LAGARDE requires on **dian Canon**
the part of the student who aims at recovering the original text of the Greek translation of the Old Testament, a "knowledge of the style of the individual translators." with which is coupled a "faculty of referring variant readings to their Semitic original, or else of recognizing them as inner-Greek corruptions." It is obvious that LAGARDE has reference merely to the material side of the task and ignores the formal questions of orthography and grammar altogether. It is a matter with which the future editor will have to grapple, whether, for example, he should admit forms with anaptyxis, as ἀγαυρίαμα, ἀγαυριῶν, -ἀσθαί.¹ He will have to choose between ἦγαν and ἦγον², ἡγάγσαν and ἡγαγον³, συνῆξε and συνήγαγε⁴, φάγη and φάγεσαι⁵, ἐργῆ and ἐργάση⁶, διανοιχθήσονται and διανοιγῇσονται⁷. With a view to all such questions the editor will have to study the grammatical evidence presented by the papyri and other

¹ ἀγαυρίαμα is found Jb 4¹⁰ 253; 13¹² B* C. 160, 161, 250, 252, 253. Compl.; Is 62⁷ AB⁸ c. b Q. 22, 51, 86, 87, 91, 93, 97, 109^{mg}, 147, 233, 302^{mg}, 306, 309. Compl.; Je 31(48)² AB⁸, 239; Ba 4³⁴ omn exc 49, 51, 62, 88, 90, 231. Compl. Ald. (106 reads ἀγαλλιαμα); Ju 10⁵ 74; ἀγαυριῶν, -ἀσθαί: Jb 31⁴ AB⁸ C. 55, 106, 137, 139, 250, 252, 258; 39²¹ 160, 252, 253; ibid. 23 160, 252, 253. See DIETERICH. Untersuchungen zur Geschichte der griechischen Sprache, p. 33 sqq. ² II K 6³ ηγον AN. A. alii.

³ I Es 1¹⁹ -ον AN. 58, 64, 119, 243, 248. Ald., -σαν rel.

⁴ Jd 11²⁰ συνῆξε BM. 16, 52, 57-59, 63, 77, 85, 107, 120, 131, 144, 209, 236, 237. ⁵ Ge 3¹⁵ φαγεσαι r. ⁶ Ge 4¹² ἐργάση 1a? Phil-codd.

⁷ Ge 3⁵ διανοιγῇσονται m.

contemporaneous literature in order to determine the linguistic forms with which the translators may be credited. In this sense the way has been paved by HELBIG's "Grammatik der Septuaginta"¹ which, however, ignores the cursives entirely. There will be also questions of internal Greek syntax on which the Semitic original has no bearing.

is really a rule
for identifying
the Greek with
the Semitic.

What LAGARDE really means by the original text of the Septuagint is that text which, from among the conflicting forms it has assumed in the history of its transmission, conforms to the Semitic original underlying the translations ("die Vorlage") and to the conception of its meaning on the part of the translators (their exegesis). The First Lagardian Canon is thus a rule for identifying the Greek with the Semitic, the Greek text, buried at present in a mass of variants, with the great unknown quantity, the "Vorlage," with which the prototype of the received Masoretic text was by no means wholly identical. After an elimination of the irrational element of chance corruptions or of the disfiguring element of conscious alteration (diaskeuastic corrections and interpolations), there remains the stupendous task of retroversion for which indeed a knowledge of the style of each individual translator is an all-important prerequisite. The pitfalls are many, not the least

Retroversion being mechanical haste. LAGARDE himself was **must not be** a sinner in that direction. Following the lead **mechanical.** of Le 26¹³, he referred *μετὰ παρησίας* = *openly, publicly* (comp. Talmudic בפרהסיא) Pr 10¹⁰ back to קוממית. He forgot that he was dealing with a translation which aims at elegance rather than at literal accuracy, as well as the fact that the rendering in Le is equally free. קוממית means properly *with head erect*; one can be made to walk with head erect, but one cannot reprove a friend with head erect. It is a question of Hebrew idiom pure and simple. The Hebrew phrase underlying *μετὰ παρησίας* Pr 10¹⁰ remains an unknown quantity.

Retroversion un-
scientific is pass-
ages wanting in
• the Hebrew.

The phrase occurs, for instance, also I Ma 4¹³: καὶ μετὰ ταῦτα λάβετε σκύλα καὶ (>SV. Sixt.) *μετὰ παρησίας*. Who will attempt to render it into Hebrew? As a matter of fact, in passages wanting in the Hebrew, all attempts at retroversion are un-

¹ Göttingen 1907.

scientific. Take, for example, the plus Le 10⁹: ἡ προσπορευομένων ὑμῶν πρὸς τὸ θυσιαστήριον. Ryssel (in Kittel's Bible) renders: או בקרבכם המזבח (comp. Ex 40³²); but או בנשתכם אל המזבח (comp. Ex 28⁴³ 30²⁰) is just as possible. Not even the particle is certain; for, though או will suggest itself first, ו is quite as correct (comp. Ex 38²⁷ (40³²)).¹

It may be even laid down as a canon that *certainty of identification is possible only when the translator has misread or misinterpreted the original.* Just as complete identity is often a less reliable criterion of the affinity of languages than differentiations of sound regulated by law, so it is only through variation, provided it is psychologically explainable, that we may with certainty arrive at the true text underlying a translation. Thus ἀγομέους Is 60¹¹ corresponds to נְהוֹנִים; but מְנֻלִים or לְקוֹחִים or (if the sense be "led as captives") מְגָלִים would be possible equivalents, and we cannot say with absolute certainty that our text was read by the translator. But ἀγομέου La 1⁴ to which נְהוֹנוֹת corresponds in the Hebrew, points *with necessity* to נְהוֹנוֹת as its equivalent, and to nothing else; for both נְהוֹנוֹת and נְהוֹנוֹת = נְהוֹנוֹת² are reducible to one and the same consonantal text.

Not merely a "knowledge of the style of the individual translators" leads to correct identification, but equally a knowledge of the style of the individual Hebrew writers. Otherwise anachronism ensues. When Kittel (in his Bible) puts down συνηχθησαν δὲ (Ge 37³⁵ = וַיִּקְרְבוּ) as a variant for וַיִּקְרְבוּ, he not only misconceives the paraphrastic character of the translation (hence also the free addition καὶ ᾤλθον), but, which is less pardonable, burdens the Jahvist with an expression which occurs but once in E (Ex 32¹), and is elsewhere in the Hexateuch confined to P.

¹ The proportion of ו to או for Greek ᾗ is 163 : 251 in the Septuagint, 2 : 3 in Aquila, 5 : 4 in Symm., 1 : 4 in Theod., 3 : 8 in AL, 0 : 1 in HLEB.

² In accordance with a well-known orthographic rule; see WELLHAUSEN, Der Text der Bücher Samuelis, pp. v-vii. Comp. Ex 15²² וַיִּצְאֵהוּ וַיִּצְאֵהוּ / וַיִּצְאֵהוּ; 18⁷ וַיִּצְאֵהוּ / וַיִּצְאֵהוּ; 18⁷ וַיִּצְאֵהוּ / וַיִּצְאֵהוּ.

The "units" of individual translations still to be determined. It is furthermore gratuitous to assume that each of the Biblical books was rendered by a new and "individual" translator. Prologues, as in the case of Ecclesiasticus, and colophons, as at the end of Job or Esther, are rare; for the most part we are left to internal evidence to determine the limits of a "unit" of translation. The "higher criticism" of the Greek version is in its very beginnings. We may assume, for example, that the Twelve are the work of one translator; the question is, how much more? A singular rendering like *συνάγειν* for Hebrew *קָבַץ* (suggested by *קָבַץ* *συνάγεσθαι* Ge 1⁹ Je 3¹⁷ and *קָבַץ* *συναγωγή* Ge 1¹⁰) which meets us Mi 5⁷⁽⁶⁾¹ occurs again twice in Je 8^{15 2} and 27 (50)^{7, 3}. It would be reasonable to ascribe both Jeremiah and the Twelve to one and the same translator, provided of course a sufficient number of similar criteria were available.

The method of Procedure. In order, however, to discover the total sum of criteria, the student must obviously collect

his data from the *whole* of the Greek Old Testament, whereupon he may proceed to distribute them among the various groups of translators thus brought to light. The right method would be first to ascertain the attitude of the general sum of translators towards all of the phenomena which go to make up a translator's style; on the basis of similarity or dissimilarity of "reaction," the idiosyncracies of the individual translators will reveal themselves. For a translator's style is the total sum of "reactions," of the ways in which the original is handled by him in the various provinces of grammar, rhetoric, semantics, and exegesis.

Illustrations: Take, for example, the use of the historical

The Historical Present. present (with *δέ* or preceding *καί*) to express

the Hebrew *consecutivum cum imperfecto*.

Examples are frequent in K⁴; there is just one example in Jd.⁵ How far the usage extends beyond the books just mentioned, remains to be investigated. It is clear that, in order to establish the interrelation of various books, the student must go through the entire Old Testament in Greek.

¹ *ל* was apparently taken as *nota accusativi*; *passivum pro activo*?

² *Activum pro passivo.* ³ *לִקְבֹּץ / לִקְבֹּץ?*

⁴ E. g., I K 5^{8, 11} 7^{1 bis} 10²¹ 13⁵ 17^{1 bis} 30¹¹ III K 18⁴⁰. 5 1 7.

Or take the criterion of "subordination in the place of coordination." The following types are met with:

- (a) καὶ λαβοῦσα ἔφαγεν ותקח ותאכל (e. g. Ge 3⁶ 4¹ 41^{14 bis});
 (b) καὶ ταχύναντες καταγάγετε ומהרתם והורדתם (e. g., Ge 45¹³ De 23^{13 (14)} 30³);
 (c) εἰσαγαγὼν καταφύτευσον αὐτούς ותמעמו תבאמו (e. g., Ex 15¹⁷ Jb 39²¹);
 (d) ἐπαγαγὼν ἐξαναλώσω σε אעלה וכליתך (e. g., Ex 33^{5 1});
 (e) καὶ ἐντείλατο φαγεῖν תאכל . . . ויצו (e. g., Ge 2^{16 2} 3^{17 3} 43^{16 4} Ex 6^{26 5} Nu 21^{16 6} IK 14^{18 7}; *ibid.* 34⁵).

Or, "the generic singular for the Semitic plural"; e. g., Si 4¹² ὁ ἀγαπῶν αὐτὴν ἀγαπᾷ / Singular.
 אהביו אהביו (אהב); 47²² τοῦ ἀγαπήσαντος αὐτόν / (אהב).

Or, conversely, "the plural for the generic singular in Semitic;" e. g., Ge 4²⁰ τῶν κατοικοῦντων / Plural;
 Ne 12⁴⁴ καὶ τοῖς συνηγμένοις (apparently neuter plural) ἐν αὐτοῖς (sc. ἐν τοῖς γαδσοφυλακίοις) ἄρχουσιν τῶν πόλεων =
 הערים / להנהיגם בהם לשני הערים; Pr 11¹⁰ Σ ἀγαλλιά-
 σονται πόλεις / תעלץ קריה; Is 1²³ ἀγαπῶντες δῶρα / כלו אהב שחד;
 13¹⁵ οἷτινες συνηγμένοι εἰσιν / כל הנספה.¹²

Or, "participial construction in the place of a finite verb in relative clauses;" e. g. Ex 20² ὁ ἐξαγαγὼν σε / אשר הוצאתיך;
 29⁴⁶ ὁ ἐξαγαγὼν αὐτούς / אשר אתם הוצאתי; Ru 4¹⁵ ἡ ἀγαπήσασά σε / אשר אהבתך and elsewhere.

Or, conversely, "a relative clause in the place of a Semitic participle;" e. g. I Es 5⁶⁹ ὅς μετήγαγεν (var. μετώκισεν) / המעלה;
 Is 41⁸ ὃν ἡγάγησά = אהבי / אהבי; and elsewhere.

¹ 15. 55. 73. 78 Lucif. ² 9. ³ omn exc n. ⁴ A.

⁵ omn exc 75. ⁶ 55. ⁷ 245. ⁸ omn exc A.

⁹ The translator took וְנִי as a general expression summing up the preceding particulars; in such cases, the Hebrew may and may not prefix the conjunction which the translator is free to express if he so chooses; comp. De 15²¹ רַע כָּל מִוֶּם רַע אוֹ עוֹר כָּל מִוֶּם רַע חֹלֹן הָאֵז אוֹ חֹלֹן הָאֵז (var. הָאֵז, *καὶ*) πᾶς μῶμος ποιηρὸς AF. alii. ¹⁰ But πᾶς τις ἀγάπα Qmg.

¹¹ oi 106 εἶσι A.

¹² ספה as an equivalent of אסף also De 32³³ (unless = אסף / אסף) and Is 29¹; Je 7²² (unless ספי = an abbreviated אסף, comp. Arabic and Aramaic imperatives of פ' verbs). ¹³ AF alii.

**Complete Induc-
tion prevents in-
dividualizing
what is general**

From an imperfect collation like the preceding it becomes evident that (1) a phenomenon may indeed be characteristic of certain groups only; (2) when a phenomenon is scattered over a wide area (possibly the entire area), it ceases to be a mark of individual style, but becomes a general characteristic of translation from Semitic into Greek; (3) certain manuscripts or groups of manuscripts (= recensions) show a predilection for a certain stylistic peculiarity. Thus I find that Lucian frequently substitutes the aorist for the historical present.¹ But such results are conclusive only when complete induction is available; otherwise the student runs the risk of individualizing what is general.

**and renders
identification
possible.** Many identifications, uncertain at the first blush, become incontrovertible when supported by further evidence which the complete induction alone will bring to light. That *παραχρῆμα*, = *on the spot*, is the equivalent of תַּחְתִּי, תַּחְתָּם II K 3¹² Jb 40⁷⁽¹²⁾, a matter of doubt for the editors of the Oxford Concordance, is corroborated by Ps 65 (66)¹⁷ Σ (= תַּחְתִּי / תַּחַת). || We are safe in identifying ἔδωκαν φυλάσσειν Je 43 (36)²⁰ with הִפְקְדוּ, if we compare πεφυλαγμένοι = לְפָקְדוֹן Ge 41³⁶. || Si 44¹ ἄνδρας ἐνδόξους for אַנְשֵׁי חֶסֶד ceases to be strange when δόξα = חֶסֶד Is 40⁶ is compared. || Ec 2²⁶ τοῦ προσθεῖναι = לִסְף / (לְהוֹסִיף) לִסְף, just as Le 19²⁵ Αἱ. καὶ συνάξετε = לְהוֹסִיף / לְאַסֵּף. || When it is remembered that in 99 instances ἀνάγειν is employed for הֶעֱלָה, it will not be difficult to identify καὶ ἐπαναγόντων Za 4¹² with מַעְלִיָּה / מַעְלֵיהֶם. || Ps 15 (16)⁴ συναγάγω τὰς συναγωγὰς αὐτῶν must certainly be reduced to אֲסִיף נִסְכֵּיהֶם / אֲכַנֵּם בְּנִסְיָהֶם, which proves that in the archetype אִסִּיךְ was written אֲנִסֵּךְ, that is, with the נ expressed, though perhaps “assimilated” in pronunciation. The evidence is afforded by the knowledge that συναγειν = כָּנַס in 11 cases. || The last two examples are illustrations of transposition for which other instances are available. Thus Na 2³⁽⁴⁾ ἐμπαίζοντας = מִתְעַלְלִים / מִתְעַלְּעִים; comp. ἐμπαῖδεν = הִתְעַלֵּל Ex 10² Nu 22²⁹ Jd 19²⁵ I K 6⁶ 31⁴ I Ch 10⁴, ἐμπαίγματα = מִתְעַלְלִים Is 66⁴. ἐμπαίκεται = do. ibid. 3⁴. || Is 35² καὶ ὁ λαός μου = יִשְׂרָאֵל / יִשְׂרָאֵל, just as Ps 28 (29)⁶ καὶ ὁ ἡγαπημένος = יִשְׂרָאֵל / יִשְׂרָאֵל. While the latter identification

¹ E. g., Jd 1⁷ I K 10²¹ 17² III K 18⁴⁰.

is supported directly by De 32¹⁵ 33⁵⁻²⁶ Is 44², we may cite in substantiation of the former. examples like Ex 17⁵ Jo 7¹¹⁻¹⁶ 24² 10²⁹⁻³ where δ λαός = ישראל, or Jd 20²⁵ where δ λαός⁴ = בני ישראל, or Mi 2¹² where δ λαός οἶτος⁵ or δ λαός⁶ = ישראל, or Si 45¹⁶ where δ λαός σου⁷ = בני ישראל, also Je 43 (36)⁶ where δ λαός⁸ and Si 48¹⁵ where δ λαός⁹ = יהודה. Instructive is also Ps 55 (56)¹¹ where δ λαός corresponds to יונה, comp. Sanhedrin 95^a (and parallels): כנסת ישראל ליונה, אימתילה, "the Community of Israel is likened unto a dove". || Only through the juxtaposition of the total number of passages¹⁰ where ἐλαβεῖσθαι τινα or ἀπό τινος = ב חסה was it possible for Prof. NESTLE¹¹ to identify καὶ ἐλαβονμένους τὸ ὄνομα αὐτοῦ Ma 3¹⁶ with וְלִחְשֵׁי בְשָׁמוֹ in the place of our וְלִחְשֵׁי שְׁמוֹ and thus to bring to light a reading which is unquestionably the original. He acknowledges his indebtedness to my article "ΛΑΜΒΑΝΕΙΝ (including Derivatives and Compounds) and its Hebrew-Aramaic Equivalents" which appeared in the AJSL, XXII (1906), 110 ff., closing with a confirmation of my own statement that we may obtain through just such work as I am planning, "in the place of the brilliant, but uncertain, guesses, results which may be predicted with almost mathematical accuracy."

Results which are equally certain are afforded by a possession of the complete material when we turn to inner-Greek corruptions. A few examples will not be amiss:

III K 8⁴⁶ καὶ επαῖεις αὐτοὺς Sixt. (= B. 92. 120. 158. 247 / **בם** and **אנפנת** has been recognized as faulty. Mr. Burney emends καὶ ἐπάξει αὐτοῖς¹²; he compares Ps 7¹², where ὀργὴν ἐπάγων = וְעָם, and Is 26²¹ ἐπάγει τὴν ὀργήν / לְפָקֵד עֵין; he should have added ibid. 42²⁵ καὶ ἐπήγαγεν ἐπ' αὐτοὺς ὀργήν / וַיִּשְׂפֹךְ עֲלֵיו חֲמָה and Si 5⁵ ἐπαγωγὴ = עֲבָרָה. But he fails to account for the "alteration" in the parallel passage II Ch 6³⁶ καὶ παταξει αὐτοὺς¹³ for which no variant reading is available. Nevertheless,

¹ Omn exc 54. 75. ² BM. 29. 30. 59. 63. 64. 72. 77. 85^mα.

³ A. 16. 32. 77. ⁴ AGA. alii. ⁵ A. ⁶ 26.

⁷ σου > *⁸. 248; αὐτοῦ 23. 70. 2. ⁹ A. ¹⁰ omn.

¹¹ Pr 24²⁸ (30⁵) Na 1⁷ Ze 3¹². ¹² ZAW., XXVI (1906), 290.

¹³ Comp. the reading καὶ επαῖεις ἐπ' αὐτοὺς 44. 52. 55. 64. 71. 74. 106. 119. 121 (with the error -ζει / -ζεις¹). 123. 134. 144. 236. 242-246. Ald. Cat. Nic.

A¹. ed 2; καὶ επαρεῖς ἐπ' αὐτοὺς A; καὶ ἐὰν ἐπαγάγῃς (ἐπάξεις Compl.) ἐπ' αὐτοὺς A.

¹³ A: καὶ ἐὰν θυμωθῇς ἐπ' αὐτούς.

we must emend here likewise: καὶ ἐπάξεις αὐτοῖς or ἐπ' αὐτούς. The emendation is rendered plausible by the knowledge that in four other places that have come under my observation ἐπάξω has by its side the corrupt variant παταξω.¹

The corrupt reading ἀπαχθησθησθαι n / ἀπάχθητε Ge 42 16 finds its analogy in Is 16 14 where αχθέσθης² or αχθεσθεις³ is found for ἀχθῆς. The latter is of course the correct reading; the translator pointed תגלי (or תגלי, תגלי)⁴ / תגלי.

Is 28 20 τοῦ ἡμᾶς συναχθῆναι is apparently corrupt. In the first place ἡμᾶς BSAQ⁵ is itacistic error for νμᾶς Γ⁶; but the whole is corrupt. The translator wrote τοῦ μὴ συναχθῆναι = Θ. With the aid of the emended text, we arrive at the reading מהתכנס / כהתכנס; (τοῦ) μὴ c. infin. = מן c. infin., as may be seen from such an example as μὴ ἐπαγαγεῖν = מַעְבֵּר Is 54 9.⁷ ¶ Hence we are led to the conclusion that the translator with his τοῦ μὴ διαπορεύεσθαι μηδὲ ἀνακάμπειν Za 9 8 pointed his text מַעְבֵּר וּמַשָּׁב / מַעְבֵּר וּמַשָּׁב. ¶ An then to the solution of a more difficult problem: I K 13 6 μὴ προσάγειν αὐτόν is reducible to מַגְנֵשׁ for the received כִּי נִגַּשׁ. For the graphic variant כִּי / מִ I cannot quote another instance from my own observations; but undoubtedly examples will be found. On the other hand, I have met with a sufficient number of the (exegetical) misreading (misinterpretation) of ש into ש and vice versa, and in this very verb I am in a position to cite Is 53 7 where both Θ προσήχθη and Σ προσηέχθη presuppose נִגַּשׁ for the Masoretic נִגַּשׁ. The form נִגַּשׁ for נִשָּׂא, which suggested itself to the translator, is no more impossible than נִשָּׂא for נִשָּׂא, or נִתֵּן for נִתֵּן. ¶ This observation leads to another find. Je 44 (37) 12 we read ἀγοράσαι / לְחַלֵּק. The consonants are supported by ΑΘ⁸ Σ⁹ ε¹⁰ s¹¹ h¹²; just how the word was pointed by them, may still be a matter of doubt; at all events, they took it as a denominative from חָלַק. According to Giesebrecht, the ren-

¹ Le 26 25 (16. 73. 77); IV K 6 19 (243); Je 22 7 (106); 25 13 (A). Conversely we find the corrupt επαξω B. 42 for the correct πατάξω rell Ez 22 13 (Rothstein's retroversion והבאתי is thus rendered problematical).

² 93.

³ 62. 147 (bad orthography). The corrupt reading underlies

الحصص s h.

⁴ Comp. Am 7 11. 17 Is 23 1 Je 47 (40) 1.

⁵ Also 24. 49. 51. 62. 106. 147. 306. 309. Compl. Hier.

⁶ = Sixt (and rell ex sil).

⁷ Activum pro passivo.

⁸ μερισθῆναι.

⁹ μερίσασθαι.

¹⁰ לפלגא אהסנניה.

¹¹ חלק חלק.

¹² ut divideret possessionem.

dering of the Septuagint goes back to the same consonants and to the same interpretation. But, to say the least, that is by no means obvious. On the other hand, we find that ἀγοράζειν corresponds in two passages¹ to לקח, just as in five passages² it represents the synonymous קנה, while Ne 10³¹ ἀγορασμός = מקח. Hence it may be readily conjectured that the translator read in his text ללקח / לחלק, that is, the same consonants transposed, and that his grammar permitted him to see in the word the form לקח as a possible by-form of לקח.³

Da 11¹⁰ Θ καὶ οἱ υἱοὶ αὐτοῦ συνάξουσιν ὄχλον ἀνα μέσον πολλῶν contains two corruptions: for ἀνα μέσον read with AA. alii δυνάμεων,⁴ and for συνάξουσιν read συνάψουσι καὶ συνάξουσιν. Note the variant συναψουσιν 88 for συναξουσιν, and the insertion of καὶ συναψουσι after πολλῶν in A. The whole is then = ובני רבים המון חילים יתגרו ואספו המון חילים רבים; συνάπτειν sc. πόλεμον, comp. with the object expressed verse 24 Θ = התגרה למלחמה, De 2^{9.24} = התגרה מלחמה and ibid.⁵ 19 = התגרה. Apparently συνάψουσι was miswritten into συναξουσιν, and then καὶ συνάξουσιν was omitted; συναψ— and συναξ— are proved as possible variants

¹ Ne 10³¹ and II Ch 1¹⁶; in the latter passage, במחיר is expressed by Α (ἐν ἀλλάγματι). Also Σ ψ 67 (68)¹⁹ לקחת is rendered بالحبة.

² I Ch 21²⁴ bis Si 37¹¹ Is 24²; At. Ge 47¹⁹.

³ Observe that while טסו supply an object denoting "portion, possession"—the "land of Benjamin" and chapter 32 are responsible for this curious bit of exegesis—, certain Greek manuscripts (א c. a. mg Qmg A) rightly add ἄρτον, "to buy food", a most natural thing to do during the momentary raising of the siege. It is true, יחצוהו Jb 40²⁵⁽³⁰⁾ is rendered by Θ ἀγοράσουσιν αὐτόν (against Θ μεριτεύονται δὲ αὐτόν, 'Α ἡμισεύσουσιν αὐτόν, Σ διαμερισθήσονται sive -θήσεται); as חצה and לקח are synonyms, it may still be possible to reduce ἀγοράσαι in Je to the received לחלק. If so, that would be another illustration of the value of complete induction. But it remains difficult to see how חצה and ἀγοράζειν could be equivalent. Perhaps the Theodotionic rendering belongs to the first half of the verse (יכר); comp. De 2⁶ where חכרו is rendered in Θ by λήμψεσθε || ἀγοράσατε = (חשבו).—An interesting variant in the Je passage is ἀποδράσαι (239). Of course, it may be a corruption from ἀγοράσαι. On the other hand, it may represent the Masoretic לקח in the sense "to slip through, run away" (see Giesebrecht *ad locum*). (Another variant is παροικισαι 26 = ?)

⁴ δυνάμεως Q is corrupt, as it does not agree with πολλῶν; the abbreviated δυνάμεω (so A) was incorrectly resolved.

not only from the reading in codex 88 but also from De 32²³ 1 and IV K 5^{11,2}

II K 3²³ *ηκουσαν* Λ for Hebrew *שָׁמְעוּ* is certainly suspicious; *ἤχθησαν* B. rell is graphically somewhat distant. But an instance like Le 1¹⁰ *αυτου* 54. 75 for *αὐτό* will suggest the possibility that *ηκουσαν* is a misheard *ἤκουσαν*. Since *ἤκον* is used as an aorist, the ending *-οσαν* for *-ον*, so frequently met with in the Greek of the Septuagint in aorists, becomes intelligible.³

κ and π are found interchanged in a number of instances. I have noted some in a previous paper.⁴ Observe the additional examples: Za 9⁴ *καταξει*⁵ / *πατάξει*⁶; ibid. 12⁴ *καταξω*⁷ / *πατάξω*.⁸

The meaningless *καταταξετε* w Ge 44²⁹ is due to ditto-graphed *τα*; the correct reading is of course *κατάξετε* = *הורדתם* (ו). The same error occurs Ge 44³¹ 9 III K 3¹ 10 Am 3¹¹ 11 Jl 3(4)².¹² The next step is the simplex *ταξετε*¹³ (hence also without an intermediary Is 26⁵ 14); and, conversely, Je 19⁸ 15 Ez 44¹⁴ 16

How complete induction may be obtained. Whether the student of the Septuagint aims at restoring the Greek original as it left the translators' hands, or, more ultimately, at a recovery of the Semitic "Vorlage," he is always face to face with problems of identification. Whatever is isolated, depending upon a particular constellation, cannot of course be covered by a general rule. But all those facts which are general, conditioned by causes which may occur again and again, must be formulated as rules, and as such be placed at the service of students. The complete induction of the

¹ *συναψω* 58 / *συνάξω* rell.

² *επισυναψει* 247 / *επισυνάξει* 71. 119. 243.

³ Comp. Is 53⁸ *ἤκει* Qmg. 62. 90. 144. 147. 233. Clem-Rom. Just-Mar. Chrys as a synonymous variant for *ἤχθη* rell.

⁴ ZAW., XXVI (1906), 88.

⁵ *שׂא* Q^a. 36. 40. 42. 49. 62. 86. 95. 106. 147. 185. 311.

⁶ B⁸ c a c. b. rell = *הכח* (ו) *ה*. ⁷ *שׂ**. ⁸ rell = *אכח* *ה*.

⁹ *שׂ**. ¹⁰ 247. ¹¹ 198. ¹² 62. 147.

¹³ Jl 3(4)² (311). ¹⁴ *ταξεis* 36 / *κατάξεis* rell.

¹⁵ *καταξω* B. rell / *τάξω* AGA = *סחתי* (ו).

¹⁶ *καταξουσιν* BQ. rell / *τάξουσιν* A. 26. 42. 49. 90. 91. 106. 198. 238. 239. 306. Ald. = *סחתי* (ו), the intermediate *καταταξουσιν* is found in 62.

sum total of general, typical facts can be secured only by two methods of procedure which can be easily combined. On the one hand, each article in the Concordance to the Septuagint and the other Greek Lexical equations.

Versions of the Old Testament, such as we possess in the Oxford publication, must be gone through for the purpose of establishing all *lexical* equations. It is obvious, following as it does from the nature of Semitic speech, that derivatives and compounds must be treated in conjunction with the primary words and the simplicia. It has been shown in this paper how the equation of ἐπάγειν τινί or ἐπί τινα = אָנַחַךְ is substantiated by the equation ἐπαγωγή = עֲבָרָה. The Greek compounds often serve merely to mark the "Aktionsart".¹ Whether we say in Greek ἀναγγέλλειν, ἀπαγγέλλειν, or the simplex ἀγγέλλειν, the Semitic equivalents will in most cases be indifferently the same. Where, on the other hand, the preverb retains its local force, as in the case of ἄγειν, the Semitic equivalent will naturally differ, and the differences will become evident as the compounds are studied in their totality and with a view to each other.

On the other hand, the text of the versions must be investigated with a view to *Grammatical* equations. *Grammatical* equations. I use the two terms, *lexical* and *grammatical*, in their widest connotations. When I say, ἄγειν = אָנַחַךְ, I abstract from all grammatical differences, such as the correspondence of the active to the Καλ, of the passive to the Semitic passive, of the aorist to the perfect, and the like. Equally, when I treat of the equations: aorist = perfect, ἐάν c. conjunct. aor. = ἔσται c. imperf., or of such stylistic peculiarities as "adjectivum pro nomine in genit.", or "activum pro passivo", I abstract from the lexical meaning of the words or phrases entering into consideration. While a modicum of grammatical observation is necessary for the proper grouping of lexical equations within each article, the material for a grammatical Concordance may be gathered direct from the texts. Complete induction, at all events, can be had only by means of the two lines of investigation, the

¹ See the lucid exposition by Moulton, *A Grammar of the New Testament Greek*, vol. i: *Prolegomena*, chapter vi.

lexical and the grammatical. It is a stupendous work, but it must be done: it is of utmost importance not only for purposes of textual criticism, but equally for a study of the oldest exegesis of Scriptures. And the results will have a decided bearing upon an understanding of the New Testament likewise which, in language and range of ideas, is linked to the Old Testament, in the Hellenistic garb.

A Hymn to Mullil. Tablet 29615, CT. XV, Plates 7, 8 and 9.—By Rev. FREDERICK A. VANDERBURGH, Ph.D.,
Columbia University, New York City.

PLATES 7, 8 and 9 in Volume XV of *Cuneiform Texts from Babylonian Tablets in the British Museum* contain texts of sixteen tablets of Sumerian Hymns which are very important. The hymns are of sufficient length and variety to afford a good idea of what Babylonian Psalmody consists. Not one has less than thirty lines, and, in the collection, seven different deities are addressed: Bêl, Sin, Adad, Nergal, Bau, Kirgilu, and Tammuz, gods whose functions relate to almost every phase of Babylonian theology.

This hymn, addressed to Bêl, who is called in the colophon, line 74, *Mu-ul-lil*, is the first in the collection and one of the longest unilingual Babylonian hymns on record. The first sixteen or eighteen lines, however, and the last thirteen are too badly broken to give a connected discourse. From line 20 to line 63, the text is in fairly good condition.

This hymn dwells upon the majesty of Bêl's word. The Non-Semitic Bêl, older than Nannar or Šamaš, who were successively rivals of Bêl as local gods, came to be recognized as "the Lord of the lands." The place of his dwelling was in the temple, E-kur, located at Nippur, probably the "house" referred to in this hymn. As "the Lord of the lands", he was conceived of as controlling the destinies of men. Thus, we find him approaching men and speaking to them, as the following hymn shows. The fuller development of Bêl's position, as belonging to a triad, where Anu was considered god of heaven, Bêl, god of earth, and Ea, god of the deep, was Assyrian. We have no trace of this thought in our hymn.

My translation of this very difficult hymn and its commentary have had the cooperation of Dr. J. Dyneley Prince, Professor of Semitic Languages in Columbia University, and Author of *Materials for a Sumerian Lexicon*, whom I have

consulted while preparing this work, and who is himself just publishing a translation of the interesting *Hymn to Kirgilu* from the same collection, Plate 23.

Transliteration and Translation.

Obverse.

BROKEN TEXT.

1. — — — — — — — — — — *nun(?) -e-bi ma-te*
— — — — — — — — — — his prince(?) approacheth.
2. — — — — — — — — — — *[-b]i ma-te*
— — — — — — — — — — his — — approacheth.
3. — — — — — — — — — — *[gin(DU)]*
4. — — — — — — — — — — *[gin(DU)]*
5. — — — — — — — — — — *a gin(DU)*
6. — — — — — — — — — — *mu-un-ši-gar(ŠA) èš(RI)*
— — — — — — — — — — it is done; it is established.
7. — — — — — — — — — — *[-e]-ne-àm dimmer mu-ul-lil-lá èš(RI)*
— — — — — — — — — — the word of Mullil, it is established.
8. — — — — — — — — — — *dimmer gu-la-a èš(RI)*
— — — — — — — — — — of Gula, it is established.
9. — — — — — — — — — — *[-a]m dimmer mu-ul-lil-lá èš(RI)*
— — — — — — — — — — of Mullil, it is established.
10. — — — — — — — — — — *ma-ab-gu-lá-a èš(RI)*
— — — — — — — — — — which maketh it great; it is established.
11. — — — — — — — — — — *ma-ab-ḫul-a èš(RI)*
— — — — — — — — — — which maketh it evil; it is established.
12. — — — — — *siğ(PA) ḫe(GAN)-in-gug(KA)-ga èš(RI)*
— — — — [bearing] the sceptre(?), let him speak; it is established.
13. — — — — — *nu-mu-da-ma(MA) -ma(MA)*
— — — — — — — — — — on(?) the one who begetteth not.
14. — — — — — — — — — — *nu-mu-da-zi-zi*
— — — — — — — — — — the one who giveth no life.
15. — — — — — *sar-ra mu-ub-bi-ir*
— — — — — — — — — — the one who bindeth the forest.
16. — — — — — *bi sila(TAR)-a mu-ub-ri*
— — — — — — — — — — the one who setteth up the road.

17. — — — [-a]b(?) -il-e me-ri ám(A. AN) -da-ab-il-e
 — — — the one who lifteth up, who lifteth up the dagger.
18. — [-n]a-àm-da šam(Ú) -sun(SE) -na-ge sag im-da-sig(PA) -gi
 — — — — the one who at the fixed period(?) of plant-
 growth smiteth the head.
19. — — — gig-ga-bi-eš ám(A. AN) ši-til(TI) -li
 — — — (to the sick one)(?) thou givest life.

LORD OF ABUNDANCE.

20. [da]m-a nu-mu-un-til(TI) -li-en ma-al-la nu-mu-un-til(TI) -li-en
 To(?) the spouse that liveth not, the husband(?) that liveth not,
21. dam-ma nu-mu-un-til(TI) -li-en dumu(TUR) -a nu-mu-un-
 til(TI) -li-en
 the wife that liveth not, the child that liveth not (thou
 givest life).
22. zal(NI) nigin ne-en zal(NI) šà(LIB) ne-en
 Abundance of everything there is, abundance in the midst
 (of the land) there is.
23. šam(Ú) ki imina-bi ki-bi-ta šam(Ú) kù me-en
 The food of that land is sevenfold, in that land food to
 eat there is.
24. tūr amar(ZUR) -bi a nag an-me-en
 In the resting place of their young water to drink there is.
25. ga-šā-an me-en mu-lu kú-šù(KU) eri-a kur(BAB) -ra me-en
 Lord art thou who for the gate in the city art protector.
26. el ki sug-bi má su-a me-en
 In the shining land on its water-ways shipping thou in-
 creasest.
27. peš a sug-ra ba-an-nigin-na me-en
 Plentifulness of water thou causest the water-ways to enclose.
28. mu gig gin(DU) eri-gú(MAL) peš me-en kud(TAR) -mu
 kú me-en
 When an epidemic sickness is spread over the established
 city my (its) judge in the gate thou art.
29. ki il ki ne-en ê(BIT) damal muḥ gá(MAL) sag ê(BIT) úr-
 ra-bi me-en
 Over the land, the high land, over the broad house thou
 art established; thou art head over the house and its
 structure (beams).

30. *lîd-šà*(LIB)-*nî-mâl*(IG) *â*(ID)-*nu-mâl*(IG) *me-en*
In the midst of their cattle when they are without power
thou art.
31. *nîn gin*(DU) *šâl-mâl*(IG) *lîd-šà*(LIB)-*nu-mâl*(IG) *me-en*
Faithful lord of compassion in the midst of the cattle that
are unsustained thou art.

LORD OF NEAR APPROACH.

32. *û-mu-un-na e-ne-âm-mă*(MAL)-*nî na-ma-da-te mu(-lu)-da ni-ma-te*
The lord whose word approacheth, to mankind it is near.
33. *e-ne-âm dimmer gu-la-ge na-ma-da-te mu-lu-da ni-ma-te*
The word of Gula approacheth, to mankind it is near.
34. *e-ne-âm dimmer mu-ul-lîl-lá-ge na-ma-da-te mu-lu-da ni-ma-te*
The word of Mullil approacheth, to mankind it is near.
35. *ê*(BIT) *zi-mu eri-a ma nî-in-û mu-lu-da ni-ma-te*
My true house which in the city of the land endureth, to
mankind it is near.
36. *mu-lu zi-mu eri-a ma nî-in-û mu-lu-da ni-ma-te*
My faithful folk (priesthood) who in the city of the land
endure, to mankind they are near.
37. *ê*(BIT)-*mu zu gal-gal-la ga-ma-te mu-lu-da ni-ma-te*
My house of great wisdom, may it be near; to mankind it
is near.

Reverse.

38. *[mu]-lu ká si îl-îl ga-ma-te mu-lu-da ni-ma-te*
He of the gate of the high tower (horn), may he be near;
to mankind he is near.

LORD OF SUPPLICATION.

39. *damal(?) gan me-en ud-da gab-da-peš mu-lu-na mu-pad-de*
Mighty, productive one thou art, let light extend, to his
people he shall speak.
40. *e-ne-âm dimmer gu-la-ge ga-ba-da-peš mu-lu-na mu-pad-de*
The word of Gula, may it extend, to his people it shall speak.
41. *e-ne-âm dimmer mu-ul-lîl-lá-ge ga-ba-da-peš mu-lu-na mu-pad-de*
The word of Mullil may it extend, to his people it shall
speak.

42. *ud-da ê(BIT) azag-ga ga-ba-da-peš mu-lu-na mu-pad-de*
The light of the shining house, may it extend, to his people
it shall speak.
43. *ê(BIT) azag ê(BIT) pisan(ŠIT)-na ga-ba-da-peš mu-lu-na
mu-pad-de*
The shining house, the house of vessels, may it extend, to
his people it shall speak.
44. *mulu hul ki-ne gál(IG)-gál(IG) e-ne zi mu-pad-de e-ne*
Sinners at the altar prostrate themselves, for life they speak.
45. *ê(BIT) ri-a-ni gál(IG)-gál(IG) e-ne zi mu-pad-de e-ne*
In the house of their protection they prostrate themselves,
for life they speak.
46. *dím-mă(MAL)-ni sar mu-un-na-ra i-dib(LU) mu-un-na-
ab-bi*
Before their king they hold a festival, the word they speak.
47. *dím dimmer gu-la dív dimmer bara gín(GÍ)-gín(GÍ)-na
i-dib(LU) mu-un-na-ab-bi*
To the queen, to Gula the queen, to the deity of the
shrine, they turn, the word they speak.

LORD OF MAJESTY.

48. *za-e ud-da ga-šá-an-mu za-e ud-da a-ba da-peš a-na a-a-
àg(RAM)*
Thou who art the light, my lord, thou who art the light,
who can reach (to thee)! What can measure itself (with thee)!
49. *e-ne-àm dimmer gu-la-ge za-e ud-da a-ba da-peš a-na a-a-
àg(RAM)*
The word of Gula, thou who art the light, who can reach
(to thee)! What can measure itself (with thee)!
50. *e-ne-àm dimmer mu-ul-lil-lá-ge za-e ud-da a-ba da-peš (a)-na
a-a-àg(RAM)*
Word of Mullil, thou who art the light, who can reach (to
thee)! What can measure itself (with thee)!
51. *a ga-šá-an-mu túr-zu-da dù(KAK)-e alam-zu ta-a-an nigin*
Father, my lord, in thy court where thou art creative, who
can encompass thy image!
52. *mulu gam-ma-zu ki nu-un-gam alam-zu ta-a-an nigin*
Of the men who bow to thee in the lands which submit
not, who may encompass thy image!

53. *dumu*(TUR) *dur*(?) (KU) *gam-ma šú še-ir nu-un-ma-al*
alam-zu tu-a-an nigin
 Of the lofty(?) sons who bow down and exercise no power,
 who may encompass thy image!
54. *dumu*(TUR) *dur*(?) (KU) *âg*(?) (RAM)-*ga*(?) *li-u gu tuš*(?)
 (KU) *ib*(TUM)-*zu zal*(NI) *šin-e ba-nà*.

LORD OF RECOMPENSE.

55. *aga*(MIR) *sag mulu-e-da e-ne šú al kud*(TAR)-*kud*(TAR)-*de*
 With crowned head among the people (and) with uplifted
 hand he pronounceth judgment.
56. *e-ne-àm dimmer gu-la-ge e-ne šú al kud*(TAR)-*kud*(TAR)-*de*
 The word of Gula, it with uplifted hand pronounceth
 judgment.
57. *e-ne-àm dimmer mu-ul-lil-lá-ge e-ne šú al kud*(TAR)-*kud*
 (TAR)-*de*
 The word of Mullil it with uplifted hand pronounceth
 judgment.
58. *igi*(ŠI)-*ní-da ud-de ê*(BIT) *bar-ri ud-de ga-ba-bi-èš*(RI)
 The light of his face in the house of decision, may it
 establish light.
59. *e-ne-àm dimmer gu-la-ge ê*(BIT) *bar-ri ud-de ga-ba-bi-èš*(RI)
 The word of Gula in the house of decision, may it estab-
 lish light.
60. *e-ne-àm dimmer mu-ul-lil-lá-ge ê*(BIT) *bar-ri ud-de ga-ba-*
bi-èš(RI)
 The word of Mullil in the house of decision, may it estab-
 lish light.
61. *a-ba ba- -a-de a-ba ba-tug*(TUK)-*gá*(MAL)-*e a-ba ba-an-*
ši-âg(RAM)-*e*
 Who can — — who can grasp it! Who can keep it!
62. *e-ne-àm dimmer gu-la-ge a-ba ba-tug*(TUK)-*gá*(MAL)-*e a-ba*
ba-an-ši-âg(RAM)-*e*
 The word of Gula, who can grasp it! Who can keep it!
63. *e-ne-àm dimmer mu-ul-lil-lá-ge a-ba ba-tug*(TUK)-*gá*(MAL)-*e*
a-ba ba-an-ši-âg(RAM)-*e*
 The word of Mullil, who can grasp it! Who can keep it!

BROKEN TEXT.

64. *dumu*(TUR)-*mu* — — — — — — — — *ba bad ùg*(RAM)-*e*
My son — — — — — who can measure it!
65. — — — — — — — — — — *ba bad a-ba ba-an-ùg*(RAM)-*e*
— — — — — — — — — — who can measure it!
66. — — — — — — — — — — — — *a-ba ba-an-ùg*(RAM)-*e*
— — — — — — — — — — — — who can measure it!
67. — — — — — *a mu* — — — — — — — — *a-ba ba-an-ùg*(RAM)-*e*
— — — — — — — — — — — — who can measure it!
68. — — — — — — — — — — — — — — *an-ši-ùg*(RAM)-*e*
— — — — — — — — — — — — — — can keep it!
69. — — — — — — — — *eš ba al bi eš mal-e a-ba ba-an-* — —
— — — — — — — — — — — — — — who can — — — — —
70. — — — — — — — — — — *an-da ku mal-e a-ba ba-an-ši-* — —
— — — — — — — — — — — — — — who can keep — — — — —
71. — — — — — — — — — — — — — — *ku mal-e a-ba ba-an-ši-ùg*(RAM)-*e*
— — — — — — — — — — — — — — who can keep it!
72. — — — — — — — — — — *in-dug*(KA)-*ga šes-ra ba-un-da-šub*(RU)
— — — — — — — — — — — — — — speak — — — — — brother — — — — — throw — —
73. — — — — — — — — — — *in-dug*(KA)-*ga* — — — — — *ba an-da šub*(RU)
— — — — — — — — — — — — — — speak — — — — — — — — — — throw — —
74. — — — — — — — — — — *lum-ma dimmer mu-ul-lil*
— — — — — — — — — — — — — — of penitence to Mullil.
75. — — — — — — — — — — *mu-bi im*
— — — — — — — — — — — — — — its lines in the tablet.

Commentary.

Lines 1 to 19. Broken Text.

The beginning of each line up to line 20, being erased, a connected translation for this section is precluded. The closing words of each line, however, giving some complete clauses, are intact. Some of the characteristics of Bêl or Mullil who seems to be the subject of the hymn therefore crop out here.

1. *bi* is no doubt a pronominal suffix in this line, *te*, occurring here and many times farther on, has in it the idea of 'approaching,' *ṭelû* being the Assyrian equivalent.

3. *gin* is a value of DU that might possibly fit here, equal to *kānu* 'set,' or the value *gub* might do, equal to *nazāzu* 'stand.'

6. *mu-un* is a common verbal prefix signifying completed action, *ši* an infix of location or direction, and *gar*(ŠA) or possibly the Eme Sal value *mar* as a verb, if we take its most usual meaning, equals the Assyrian *šukānu*. *ēš*, one of the values of RI, equal to *nadû*, gives the meaning 'establish' which is probably the one intended for the close of this and the following six lines.

7. *e-ne-ām* is probably the subject of *ēš*(RI). *e-ne-ām* equals *amātu* and is a dialectic phoneticism for *inim*(KA). Br. 508. *e-ne-ām* occurs 15 or 16 times in this hymn. *e-ne-ām* is an 'authoritative word.' It sometimes stands for the god himself; see line 50. *mu-ul-lil-lā* is the Eme Sal form in Sumerian for Bêl's name.

8. *gu-la-a* equals *rabû* 'great,' and was also the name of a goddess. She appears in this hymn evidently as the consort of Bêl. The gods sometimes had more than one consort. The chief consort of Bêl was Bêlit. The goddess naturally possessed the same qualities as the god with whom she was consorted, but in a diminutive degree. Gula is more generally known as the consort of Nin-ib.

11. *hul*, the common Sumerian word for 'evil.'

12. We cannot state with much certainty the relation of PA in this sentence. *he*(GAN)-*in-gug*(KA)-*gu* is clearly a verb in the precative construction. *in* may be a part of the precative prefix, *he-in* being dialectic for *gan*.

13. *ma*(MA) = *alâdu*, Br. 6769, and the infix *da* may be locative, the pronominal representative being understood.

14. *zi* is one of the common words for 'life,' = Assyrian *napištu*, but here evidently a verb.

15 & 16. *sar-ra* = *kirû*, Br. 4315. *ub* and *bi* are verbal infixes, MSL. p. XXIV. *ir* = *kamû*, Br. 5386.

17. *il* = *našû*, Br. 6148. *me-ri* is phonetic for the Eme Sal: *mer*(ÁD), *paṛru*. *âm*(A. AN) seems to occur sometimes as a verbal prefix, Br. p. 548, but it serves more usually as a suffix equal to the verb 'to be.' In *da-ab*, *dab*, 'unto it,' we have the pronominal object represented by *ab*.

18. *šam*(Ú)-*sun*(SE)-*na*, a word not often found outside of the collection of hymns in CT. XV, is explained by Professor Prince in his translation of some of these hymns, as 'plant-growth.' It is to be regretted that the sign SE in this com-

bination in these inscriptions is not very readily identified; the phonetic complement *na*, however, helps to confirm the reading of the sign as *sun*. *sig*(PA) = *malûšu*. 'smite,' Br. 5576.

19. *eš* is sometimes a postposition, Br. 9998. *tîl*(TI) = *balātu*.

Lines 20 to 31. Lord of Abundance.

The Assyrian Creation Legends assume that Bêl, the old god of Nippur, was the god of the earth *par excellence*, and that it was he who prepared the earth for the habitation of mankind. See Jastrow. *Religion of Babylonia and Assyria*, p. 140.

20 & 21. *dam* = *aššatu* and *dumu*(TUR) = *mâru*, and the parallellism between the two lines would suggest that *mu-al-la* must mean 'husband,' being a dialectic form for *mûl*(IG) which equals *bašû*, also *šukânu*, signifying 'substance,' 'existence,' &c.

22 & 23. *zal*(NI) = *barû* 'be abundant,' Br. 5314. *nigin* = *napharu*, Br. 10335. *imîna-bi* = *sibitti-šunu* or *sibitti-šu*. *šam kû* = *rîtu akâlu*, 'food to eat.'

24. *tûr* = *tarbaçu* and *amur*(ZUR) = *bûru* 'offspring,' *a nag* = *mê šatû* 'water to drink.' *kur*(BAB)-*ra* in 25 means 'protector,' from *našâru*.

26 & 27. These two lines go together and illustrate how Bêl's and Ea's provinces overlap each other, as regards the water-courses. *sug* = *šusû* and *su* = *ruddû*. *peš* = *rapâšu* 'extent,' from which we derive the idea 'plentifulness,' and *a* may equal *mû* 'water.' *ba-an-nigin-na* is a verb; the prefix, one of usual occurrence, in a pronominal way takes up the remote object just given. *nigin* as a verb = *palâru*; above, it is a noun.

28. This and the following three lines offer a considerable difficulty in translation. *mu* = *šattu* from the fuller form *mu-an-na* 'name of heaven,' i. e., 'year.' From *gig* 'sick' and *gin* 'going' we get the translation 'epidemic sickness.' *lud*(TAR) = *dânu* 'judge.'

29. *il* = *elû* or *našû*, and *muh*, although usually a preposition, seems here to have the place of a postposition. *ûr-ra* = *gušûru* 'beam.'

30 & 31. These two lines have parallel thoughts and consequently should be explained together. Their duplicates in Plate 24, possessing slight phonetic variations, help to a cor-

rect reading. Perhaps IG should be read *gûl*, but line 11 of Plate 24 gives *ma-al*. Possibly *lid* is a loan-word from the Semitic *lîdu* which is connected with *alâdu*, but there are lexicographic references which connect it with *lû*, making it equal to the feminine *littu* 'wild cow.' It is interesting to note also that the sign LID has a value *ûb* = *arlu* 'wild ox.' *gin* (DU) = *kânu* and *šâl* = *rênu*.

32 to 38. *Lord of Near Approach.*

The Babylonian theologian, as pointed out by Professor Jastrow, regarded Bêl as representing providential forces which operate among the inhabited portions of the globe. This idea is apparent here in the lines about Bêl's near approach.

32. Possibly it is well to note the difference between *na-ma-da-te* and *ni-ma-te*. The first, it will be noticed, has the infix *da* which the second does not have. This must be because of the locative relation of *da* to the noun preceding the verb. Another difference is that the first verb has the prefix *na* where the second has *ni*. *na* does not often occur as a prefix; when it does, it usually belongs to the verb of the third person. *na* may probably be a harmonic equivalent of *ni*. *ni* and *ne* are both used with an aorist tense. If *te* means 'is approaching,' *ni-te* must mean 'is near.' *ma* as a prefix would be a harmonic equivalent of *mu*, but, as an infix, must have reference to matter going before. *mu-du* seems to be a scribal error for *mu-lu-da*; see the same refrain in line 33.

35. *ni-in-û*: *nîn* (*ni-in*) is a reduplication referring to the indirect object, probably to *ma* 'land.' *û* as equivalent to *labâru* can mean 'endure.' Possibly a value should be chosen for *Û* as meaning 'old' that may take the phonetic complement *-ra*; instances with *Û + ra* meaning 'old' are on record. On the other hand, *ra* may not be a phonetic complement at all.

38. *si* = *karnu* 'horn.' Notice the precativ form of the verb, *ga-ma-te*; the infix *da* now has dropped out.

39 to 47. *Lord of Supplication.*

The thought passes here from that of Bêl giving command to his people to that of the people offering prayer to Bêl.

39. *damal* = *gabšu* and *gan* = *alidu*. *gab-da-peš* seems to be

for *ga-ba-du-peš*; see the next line. where *ga* is plainly precative. *peš* = *rapāšu* 'extend' as above. *pad* = *tamū* 'speak.'

43. *pišan*(ŠIT)-*na* = *pišannu* 'vessel;' we are guided by the phonetic complement in determining this value of ŠIT; the value *šid* would have given *alaktu* 'going,' *šiti* = *menātu* 'counting,' and *sangu* = *šangū* 'priest.' Sacrificial vessels are no doubt referred to.

44. *ki-ne*, 'place of fire.' hence 'altar.' *gāl*(IG) = *labānu*, Br. 2241. *ri* in line 45 = *ḫatānu* which gives us the word 'protection.'

46. *sar*: the right Assyrian equivalent for this word here is *isinnu*, Br. 4311. No other meaning for SAR will suit in this line. From *sar* as 'forest' we easily pass to the conception 'park' and then to the 'festival' that might be held there. *ra* = *ramū*, Br. 6362. *i-dib*(LÜ) is the same as the Assyrian *kubū*. *i-dib* is said to mean 'seizing speech' and *i-nim*, referred to above, 'high speech.' It may not, however, be safe often to regard the parts of such composite words as having ideographic value. *bi* = *kibū* and *nab* (*na-ab*) calls up the double object, direct and indirect, giving such a use as in 'they speak it to him.'

47. *dīm* = *šarru*, Br. 4254, and of course we can say 'queen.' if *dīm* can mean 'king.' *bara* = *puraklu* and *gín*(GÍ) = *tāru*.

45 to 54. Lord of Majesty.

The last two lines of this section are exceedingly difficult, lines 51 and 52 also give considerable trouble.

The thought that the loftiness of the deity as incomparable, found here, appears in other hymns, particularly the great bilingual hymn to Nannar, published in IV R. 9. See Vanderburgh's *Sumerian Hymns*.

48. *a-ba* = *mannu* 'who?' *a-na* = *minū* 'what?' *a-a-āg*(RAM); reduplication of *a* for a verbal prefix is unusual; *āg*(RAM) = *madādu* 'measure.' In line 50. *na*, by scribal error, stands for *a-na*.

51. *tār*, 'court;' see line 24. *dū*(KAK) = *banū*, *epēšu*, *ritū*, &c. *alum*, according to Sb. 378. but *šalam*, according to Br. 7297, giving the Assyrian *lānu* and *šalmu* 'image.' *tu-a-an* = *minū* 'what?;' Br. 3969. *a-an* above = 'what?' *ta* alone also can = 'what?;' Br. 3958. *nigin* = *saḫāru* similar in meaning to *pa-lāru*; see lines 22 & 27. *gam* in 52 = *kanāšu* 'bow down.'

53. *dumu*(TUR) = *mâru* 'son;' see line 21. *dur*(KU); possibly KU = *rubû*; if so, the value would be *dur*, Br. 10498 & 10547. It would not alter the sense very much, if we should read KU as equal to *kakkê* and say 'son with weapons.' *šû* = *emûku* 'power.' *še-ir* is dialectic for *nir* = *bêlu*, *etellu*, *šarru* and other synonyms. *ma-ul* is the same as *gâl*(IG) = *šakânu* 'establish.'

54. It is almost impossible to tell how KU and RAM should be read in this line. If the fourth sign is *gu* the value of RAM is *âg*. RAM can = *ûru* 'command,' yielding a parallel with *ib*(TUM) 'wrath.' *li-a* (*dišu*) 'luxuriant growth' + *gu* 'vegetation' form a parallel with *zal*(NI) 'abundant' + *šim-e* 'herbage.' The second KU read as *tuš* (*ašâbu*) makes a parallel to *nâ* (*rabâsu*).

55 to 63. *Lord of Recompense.*

In passing from the previous section to this, there is a change in the pronouns used. In that section Bêl is referred to with the pronominal suffix *-zu* 'thy;' in this section by the suffix *-ni* 'his.'

55. *aga*(MIR); this sign signifies 'crown,' and the value *aga* is apparently from the Semitic *agû*. *al* = *šîru* 'lofty.' Br. 5749. TAR we have had above; with the value *kud*. required by the phonetic complement *de*, we are led to some such meaning as 'judge,' *dânu*, Br. 364. line 28.

mulu-e-da; in line 33 and elsewhere. we have *mu-lu-da*; is there any difference in these two phrases except phonetically? Is *-e-*, in a case like this. equal to the definite article 'the?'

58. *igi*(ŠI) = *pânu*, Br. 9259. *bar* = *pirištu*, Br. 1788.

61. *tug*(TUK) = *aḥâzu* 'seize.'

A Hymn to the Goddess Kir-gi-lu (Cuneiform Texts from the British Museum, XV., Plate 23) with translation and commentary.—By Professor J. DYNELEY PRINCE, Ph.D., Columbia University, New York City.

THE following Eme-Sal hymn to the goddess *Kir-gi-lu* (obv. 4; also *Nin-kir-gi-lu*, rev. 14) is distinctly a prayer for fructifying rain, the granting of which in this petition is made the chief function of the deity. That *Kir-gi-lu*, occurring also Reisner. *Sum. Bab. Hymnen*, NO. III., Pl. 137. col. iii, 4, was none other than Ištar seems apparent from obv. 4, where *Kir-gi-lu* is mentioned as the tutelary deity of the *É-Nanā*, the temple of Ištar. Ištar herself was the personification of fertility, the great mother of all that manifests life (Jastrow. *Religion*. Eng. Ed., p. 459), so that a hymn of this character, praying for plenty, is perfectly natural.

The exact meaning of the name *Kir-gi-lu* is not clear, but it seems undoubtedly to be connected with the idea of plentiness. Note that the sign KIR-PES = *mamlû* 'fullness,' 6933; also KIR-GAL. 6941: = *marû* 'be fat,' 6934; = *rapâšu* 'extend,' 6936; *šalâšu* 'to triple' = 'multiply,' 6937, all which meanings are in harmony with the general idea of fertility (MSL. 269).¹ For further discussion, see also below on obv. 2.

In obv. 20, 21, I have rendered DA-MU as Bau, in spite of the absence of the god-determinative AN. Here it should be noted that in some forms of the Babylonian theology, Bau was the mother of Ea, the deity of the ocean; viz., of water. Jastrow has suggested (*Religion*, p. 61) that, since Ea represents the waters of the abyss or lower realm, Bau, his mother, probably was the deity of the waters of the upper realm; i. e., the clouds, which makes an allusion to her in the present hymn peculiarly appropriate and implies her identification by the writer with the water-giving Ištar.

¹ MSL. = John Dyneley Prince, *Materials for a Sumerian Lexicon*, Leipzig, 1905. Numbers not preceded by a title are references to Brünnow's *Classified List*.

An interesting feature of this hymn is the occurrence of glosses giving the Eme-Sal pronunciation of certain signs; e. g., obv. 5: UN = *u*: UBUR = *u-bi-ur* for *u-bu-ur*; also rev. 8, *zu-ur zu-ur*, written under a sign which otherwise might be difficult to place.

I am especially indebted to the Rev. Drs. F. A. Vanderburgh and Robert Lau for many valuable suggestions in connection with the rendering of this difficult hymn.

CT. XV. Pl. 23.

Obverse.

1. *du(UL)-e pa-pa-al-ta er(A-ŠI) seq(A-AN)-da*
For growth in the bud: a lamentation for rain
2. *azag-zu-mu nin ga-ta dimmer Kīr-gi-lu*
My glorious wisdom, lady endowed with plenty, goddess
Kīrgilu.
3. *kur-sun(GUL)-sun(GUL) MU-GIG-IB ga-ta dimmer*
an-na
who irrigatest the earth, goddess endowed with fulness,
deity of heaven.
4. *nin-zi-mu ga-ta dimmer ē Nanā-a-ra*
O my faithful lady, endowed with fulness, goddess of
the house of Istar!
5. *dimmer u(UN)-má i-de ma-al ama ubur zi-da*
O goddess of my people (land), wise one, mother of un-
failing breast!
6. *bi-bar lil-e ga-ta dimmer sal-šug*
Messenger of mercy, endowed with fulness, goddess of grace!
7. *du(UL)-e pa-pa-al-ta tuš(KU)-a-ta*
When growth dwelleth in the bud.
8. *du(UL)-e pa-pa-al dimmer azag-ga-ta*
the growth of the bud (is) from the goddess of glorious
fulness.
9. *du(UL)-e pa-pa-al dara(ĪB)-a-ta*
When the growth of the bud becometh full.
10. *ki-ú(Ĝ(RAM)) me-e ma-ar ba-un-ag an-na*
the beloved one establisheth the decree: heaven ordaineth it.
11. *mulu-di ama-mu-ra du(Ĝ(KA))-ga-na-ab me-na mu-un-gaba-e*
For the man of judgment who prayeth to my mother,
his command she setteth forth.

12. *ga-ta dimmer Gir-gi-lu-gc(KIT) dug(KA)-ga-na-ab me-na mu-un-gaba-e*

For him who prayeth to the fulness of Girgilu, his command she setteth forth.

13. *la-bar lil-e ga-tu dimmer sul-šaḡ-bi me-na mu-un-gaba-e*
(She) the messenger of mercy, endowed with fulness, his lady of grace, his command she setteth forth.

14. *dimmer šes-ki-ra nauš(GIS)-gi-ta dug(KA)-ga-na-ab me-na mu-un-gaba-e*

For him who prayeth to Nannar (Sin) with devout inclination(?), his command she setteth forth.

15. *muš(GIS)-gi ama dimmer azaḡ-ga-tu a-a-mu-ra dug(KA)-ga-na-ab*

For him who prayeth devoutly inclining(?), before the divine mother endowed with glorious fulness: (viz.) to my father.

16. *me-na azag mu-un-tu(KU) mu-un-gaba-e me-na mu-un-gaba-e*

his glorious command she setteth forth: his command she setteth forth.

17. *me-na za mu-un-tu(KU) mu-un-gaba-e me-na mu-un-gaba-e*

His command as a jewel she fixeth: she setteth it forth: his command she setteth forth.

18. *azaḡ ni-tuk-at azaḡ-mu ba-ti*
The glorious one she is: my glorious one she liveth.

19. *za-gur(KUR) ni-tuk-a za-mu ba-ti*
A crystal she is: my jewel she liveth.

20. *lil es AB) du-mu ide(SI)-ni-šu(KU) ba-gúl*
The storm of the house, the goddess Bau before its very face rendereth nought.

21. *dil es(AB) du-mu ide(SI)-ni-šu(KU) ba-xul*
The storm of the house, Bau before its very face destroyeth.

22. . . . *a-a-mu ide(ŠI)-ni-šu(KU) ba-já-el)*
(the welfare?) of my father before his very face she seeketh(?).

23. *a-a-mu ide(SI)-ni-šu(KU) ba*
. of my father before his very face she

24. *ni-di(LU) nu-a-se er(A-SI) seḡ(A-AN)-du*
. lament for lack of grain: lamentation for rain

25. (*Kir*)-*gi-lu-ge*(KIT) *i-dib*(LU) *nu-a-še er*(A-ŠI)
šeq(A-AN)-*da*
 of Kirgilu: a lament for lack of grain; a lamentation for rain

Reverse.

1. *i-dib*(LU)-*má me-a*
 my lament; the voice of
2.
3. *u-sîn-na a-še-ir er*(A-ŠI)-*ra-ta*
 The gift of vegetation (in return for) penitential psalms and tears (she will grant?).
4. *damal-šuyqad-mu er*(A-ŠI)-*xul aḡ-na me-na*
 O my broad headdress (all sufficient protection). I(?) making sad lament, the voice
5. *me-e dimmer En-lil tub*(KU)-*bi šeq*(A-AN) *ide*(ŠI) *gin*(DU) *a-mu lu*
 The decree of Bêl is established; the rain goeth forward; my water . . .
6. *a eri-gûl-a-mu ga šeq*(A-AN) *ide*(ŠI) *gin*(DU) *a-mu lu*
 Water for my city laid waste; plenteous rain goeth forward: my water
7. *ê-gûl-la eri-gûl-la-mu zi*
 For my house laid waste, for my city laid waste, life (hath been decreed?)
8. *šu-ni-el-ta im-ta zur-zur er*(A-ŠI) *gig ni-ib-*
 With her exalted hand in the rain-storm she establishes it: (in response to) troubled weeping
9. *gaba-ni su-ub azag ga al gûl-e er*(A-ŠI)-*gig ni-ib-had*(BE)
 Her breast is glorious (and) shining: the devastation (in response to) troubled weeping (she will remove?).
10. *úr-ni u-kul-tir-ra-ni saḡ*(?) *er*(A-ŠI)-*gig ni-ib-*
 Her step (tread) the seed of her vegetation graciously(?) (in return for) troubled weeping (will cause to be?).
11. *utuga-a e-gûl*(?)-*gûl*(?)-*bi muš*(GIŠ) *ba-un-tuk-a-ta*
 When on the day of plenty, with her many streams(?) she giveth ear.
12. *en dumu*(TUR) *dimmer Nin-ki-gal-la-ḡe*(KIT) *nin-a-ni-šû*(KU) *mu-un-ut-na-me-en*
 the lord, the son of the goddess Allatu (Ninkīgal), unto his lady is inclined.

13. *azag-zu-mu ninga-tu dimmer Gir-gi-lu kur-tu nam-ta-ê*
(UD-DU)

My glorious wisdom, lady endowed with fulness, the goddess Girgilu over the land cometh forth.

14. *er(A-ŠI)-lib(m)-mu dimmer Nin-Kir-gi-lu*

A penitential psalm to the goddess, the lady Kirgilu.

15. *sal-zi-du i-dib(LU) ga-man-ku-tin mûlu nam-mu-un-zi*

Faithful lady, may (her) word give life: she is the one who endoweth with life!

16. *du(UL)-e pu-pa-al-la ga-man-ku-tin*

The growth of the bud may she endow with life!

17. *du(UL)-e ki-azag-mu ga-man-ku-tin*

The growth of my pure place may she endow with life!

18. *ki azag ki-?-na ga-man-ku-tin*

The glorious place; the place of . . . may she endow with life.

19. *ki-ay(RAM?) me-e mar(?)-ra-mu ga-man-ku-tin*

The beloved one (the plaint which I make?) may she endow with life-giving effect!

20. *azag a-a-mu ba-til-la-a*

The glorious one: when she giveth life to my father:

21. *za a-a-mu ba-til-la-tu*

The jewel: when she endoweth my father with life!

Commentary.

Obverse.

1. *du(UL)* = *šululu* 'complete.' 9142. The original meaning of the sign seems to be 'advance,' as seen in *šithû* 'advance, cause to advance.' 9162. It also means *naqâpu* 'gore,' said of a bull. 9144. For this root-idea 'push,' see MSL. 85, s. v. *du(UL)*.

pu-pa-al-tu, with suffix *-ta*; also 7, 8, 9. See 5631--5632: *giš(IZ)* *pu-pa-al gestin* = *dillatu* and *pu-pallu*; loanword. *papa!* may be for *pu!-pa!*, a fuller form of PA-PA 'staff, shoot of a plant.' Cf. 5629 U PA-PA-PA = *anaru* 'a sort of plant.' I render 'vegetation' here.

er(A-ŠI), also rev. 3: 'weeping' (lit. 'water of the eye'); 'lamentation' (see MSL. 104).

šeq(A-AN) 'water of heaven' = 'rain.' See especially, MSL. 313.

It is highly probable that this line is the heading of the inscription. Note the refrain-like recurrence of the words *du(UL)-e pa-pa-al* in obv. 7, 8, 9. Obv. 25 is possibly another heading for the second part of the hymn given in the reverse.

2. *Azag-zu-mu*. I render 'my (*mu*) glorious wisdom (*azag* = *ellu*, 9890 + *zu* = *nimêqu* 'deep wisdom.' 136). The conventional Semitic translation of this combination is *emuqtu* 'deep wisdom;' cf. Reisner, *Hymnen*, plate 135, NO. III., col. iii, 3; a parallel passage.

nin-ga-ta; lit. 'lady endowed with breast' = 'plenteousness' (MSL., 111: *ga* 'breast, milk, plenty').

dimmer Kir-gi-lu, the name of the goddess. See also Introduction for discussion. *Kir-peš* = 6933: *mamlû* 'fulness' (MSL. 269). *gi* seems also to mean 'plenteousness' (MSL. 136). The name then appears to mean 'the lady who embraces (LU-DIB) copious plenty,' an epithet harmonizing admirably with her character as set forth in this hymn. where she is the giver of plenty-bringing showers. It is not certain whether the signs KIR-GI-LU should not be read *Peš-gi-lu*, or even *Peš-gi-dib*, *peš* being the usual Sumerian value for KIR (MSL. 269).

3. *kur-sun-sun* 'who irrigatest the earth.' *sun* = *gûl* must denote irrigation here from the context. which demands a benevolent function of the goddess. With the value *gûl*, however, it means 'inundation;' cf. rev. 6: *gûl* = *abātu* 'destroy by water.'

mu-gig-iš = 1319: *ištarîtu* 'goddess;' cf. also Reisner, *Hymnen*, pl. 135, III. col. iii, 5: *mu-gig-an-na* = *il ištariš il A-nim* 'the goddess of heaven.' *mu-gig* seems to mean 'heavy' or 'important name,' being a grandiloquent equivalent for the goddess Ištar, whose name was all powerful. Note that *gig* = *kibtu* 'heaviness, trouble,' 9232. *iš* perhaps = *barû* 'be full,' as in obv. 9, q. v.

4. *nin-zi-mu* 'my faithful lady;' *zi* = *kênu* 'faithful,' 2313, probably not 'lady of life' here, as *nin-zi* suggests *nin-zi-da*, the fuller form (see below on obv. 5). Reisner, *Hymnen*, 135, III, col. iii, 8: *rubâtum kêtum* 'lady of faithfulness.'

ê nanâ 'the house of Nanâ' was probably *e-an-na* in Erech. Note the dative *-ra* for the genitive *-ge*(KIT).

5. *dimmer u(UN)-mâ*. Un, here with the new value *u*(ES) especially glossed in, = *mātu* 'land,' 5914, or *nišu* 'people,' 5915. The usual EK value is *kalama*. The suffix *mâ* here is, I think,

the ES suffix *mà* = EK *-mu* of the first person. See also rev. 1. Elsewhere in this hymn, the ordinary EK *-mu* of the first person is used, as obv. 2—4; rev. 6, etc., perhaps, however, applied purely ideographically and to be pronounced *mà*, since the hymn is unmistakably ES.

i-de ma-al. lit. 'having eye' = 'perception' = *mudû* 'wise one.' 4011. On the val. *ama*, see MSL. 30.

The sign UBUR with value *ubur* (5553) also = *ugan*, 5552. The word *u-bur* seems to be a combination of the abstract *u-* + *bur* 'vessel,' MSL. 63, and probably means 'the vessel *par excellence*,' hence 'breast, teat.' Note that the gloss here indicating the pronunciation is written *u-bi-ur* and not *u-bu-ur* as might be expected. This practically gives the consonantal value *b* to the syllable *bi*, an unusual phenomenon.

zi-da = *kênu* 'fixed, unfailing,' 2313.

6. *la-bar* = *sukkallu* 'messenger,' 993.

lil-e must = *silûtu* 'mercy' here, 5932, although this meaning is not well established. The context certainly requires a benevolent sense. *lil* seems to occur in an opposite sense in obv. 20.

dimmer-sal-šag; I render 'goddess of grace,' regarding *sul* as the abstract prefix (as in *sal-xul* = *limuttu* 'evil,' 10958) before *šag* = *dumqu* 'grace,' 7292.

7. *tuš(KU)-a-ta* 'when it is established,' lit.: 'when it dwells.' KU = *ašâbu* 'dwell,' 10523.

9. *dara(İB)-a-ta* 'when it becometh full.' See MSL. 72. IB means 'be plenteous'; cf. DAR = *tarru*, 3471 and *dara(İB)* = *isxu* 'a swarm of fish,' 10483. Hence the rendering here.

10. *ki-ág(RAM)* = *narâmu* 'beloved,' 971.

me-e = *qûlu* 'voice, decree,' 10370 and 10374: *parçu* 'decree.'

má-ar must be ES for *gar* = *šakânu* 'establish,' 11978.

ba-an-ag 'makes, ordains,' *ag* = *epêšu* 'do, make,' 2778: also rev. 4. Here *ba-an-ag* may be construed participially 'maker of,' 'heaven is the maker of it.'

11. *mulu* 'man,' 6398 + *dî* = *dênu* 'judgment,' 9525.

ama-mu-ra 'to (-ra) my (-mu) mother' (*ama*; see on obv. 5).

dug(KA)-ga-na-ab; lit.: 'to him who (*nab*) speaketh (*dug-ga* = *qibû*, 531).

me-e; here with third personal suffix *-na*.

gaba = *pašâru* 'loosen, solve,' here = 'set forth,' 4488.

14. *šeš-ki-ra* 'to Nannar,' the moon-god. Cf. CT. XV., pl. xvii, obv. 2—5, and see Vanderburgh, *Sumer. Hymns*, p. 45, for the term.

muš(GISŠ)-*gí-ta* 'with (*ta*) inclination' = *muš*(GISŠ)-*gí*. I assign the ES value *muš* to GIS which seems to serve here as an abstract prefix to the root *gí*, which connotes the idea 'bending.' The sense appears to require the idea 'prostration in worship.'

15. *a-a-mu-ra* 'to my father;' *a-a* = *abu*, 11690.

16. If the third sign is *šub*(RU), it seems to mean *nadû*, 1434: 'fix, place' and qualifies *me-na* 'his command,' but I am inclined to read it as *azag*, owing to *za* in line 17 and a similar parallelism between lines 18 and 19.

mu-un-tu(KU) 'she establisheth' (also obv. 7). KU. 10528 = *kanû* 'fix, establish' (see MSL. 210, 211). In rev. 5, KU-*bi* must be read *tub*(KU)-*bi*, with the same meaning.

17. *za*; also obv. 19 = *abnu* 'stone' or 'jewel.' MSL. 359—360. Cf. Rev. 20.

18. *ba-ti* 'she liveth' (MSL. 330).

19. *za-gin*(KUR) 'jewel, shining object' (MSL. 362), usually with ideogram *tak* = *abnu* 'stone,' 11773. Note that *zagin* is repeated in the second member here by the simple *za* 'jewel' (see on obv. 17).

20. *lil-eš*(AB) *da-mu*; a very difficult combination. The first sign may be *lil*(KIT) = *šâru* 'wind,' 5933; *zaqiqu* 'tempest,' 5934. *eš*(AB) means *bîtu* 'house,' Sb. 189, while *da-mu* may signify the goddess Ba-u, 6662, in spite of the absence of the god-sign AN. See above Introduction.

ide(ŠI)-*nî-šû*(KU) can only mean then 'before its very face;' viz., directly, without resort to subterfuge, she destroys the storm of the hostile house, or perhaps the storm which attacks 'my house.'

ba-gul; *gul* must = *abâtu* 'destroy,' 8954 (cf. rev. 6, 7), here used in rhymed assonance with the clear *xul* of the following line.

21. *ba-xul*; by paronomastic association *xul* = *qullulu* 'slight, treat lightly,' 9500; *lamânu* 'treat evilly,' here associated with the preceding *gul*.

22. *ba-pî-el*. Thus Dr. Lau, who cites 7977: *ba-pî-el-la(l)* = *ište*, 'cares for, seeks.'

Line 23, although very mutilated, seems to imply a benevolent sense; viz., that the goddess aids the father after destroying the foes.

24. *i-dib*(LU), also obv. 25, rev. 1, = *qubû* 'lament,' 4040. Note also rev. 15.

nu-a-še must be the privative *nu* 'lack of' + *a-še* 'irrigation of grain.' On the following words, see on obv. 1. This is perhaps a heading of the reverse part of the hymn.

Reverse.

1. *i-dib(LU)-mà*, with apparent ES suffix *mà* of the first person. See on obv. 5.

3. *u-sun-na* 'gift of vegetation.' The second sign here is clearly *se*, *sum*, but to be read *sun* with the following *-na* complement, as Dr. Lau has suggested. The preformative *u* must mean 'plant,' 6027. The whole combination then means 'plant-giving.'

a-še-ir = *tunîxu* 'penitential psalm,' 11574. This combination was probably identical with *a-ši*, obv. 1, which has the val. *er*.

4. *damal šagqad-mu* means literally: 'my broad headdress;'
šagqad = *kubšu* 'headdress,' 8864, MSL. 310. The meaning of the line is obscure. Possibly "headdress" means protection of the head, referring to the goddess as a protecting force. Cf. also Pl. XXIV, line 10 of Ct. XV.

5. The decree of *En-lil* = *Bêl*, who is the god having authority over the storm (see Vanderburgh, *Sum. Hymns*, pl. 15. line 15).

tub(KU)-bi it is established. See on obv. 16—17. On *šeq* (A-AN), see on obv. 1.

ide(SI)-gin(DU) must mean that after the supplication to the goddess was made, the fructifying rain then went on. The allusion in the word *a-mu* at the beginning of the final mutilated phrase is of the same character.

6. *eri-gul-a-mu* seems to mean 'my city laid waste;'
gul is the same sign as in obv. 20 = *abātu* 'destroy,' 8954.

ga šeq(A-AN), I render, 'plenteous rain,' regarding *ga* as standing in adjectival relation to *šeq*(A-AN).

7. *ê-gul-la eri-gul-la-mu*; here the possessive *-mu* applies evidently to both the nouns *ê* and *eri*. The sign *zi* must mean 'life' (MSL. 363—364), as the context demands a promise.

8. *šu-ni-el-ta* 'with her glorious hand;'
šu 'hand' being the symbol of the goddess's power.

im-ta 'in the rain-storm;'
im = *zunnu* 'rain,' 8374. The goddess establishes the coming of plenty by the coming rain.
zur-zur = *kunnu* 'establish,' 9087 (9071); note the gloss here *zu-ur* *zu-ur*.

er(A-ŠI)-*gig* may commence a phrase meaning 'in reply to troubled weeping she will bestow rain or plenty.' Note that *gig* = *marĝu* 'troubled,' 9235.

Then follows a verb with the prefix *nib-* as in the following line 9.

9. *su-ub* = *mašāšu* 'glitter, shine.' 203.

I cannot render *ga-al*, as the line is very obscure.

10. A difficult line. I regard the first sign as *úr* = *kibsu* 'step.' 11891. Perhaps her step or tread calls forth vegetation?

u-kul-tir-ra-ni; a difficult combination. I am inclined to render: *u*, probably merely the abstract preformative here + *kul* = *zêru* 'seed,' 1668 + *tir* = *kištu* 'plantation,' 7661. The sign rendered *šag* 'graciously' is very obscure in this text.

11. *utu ga-a* can only mean 'on the day of plenty,' = *ga-a*, as in rev. 6. *e-gul*(?)-*gul*(?)-*bi* is very doubtful, as the sign I read *gul* might just as well be RAM. The sense seems to be that *e* = *iku* 'water-stream,' 5841 (MSL. 92—93). If the second sign is *gul-sun*, this is the *gul-sun* 'inundation' as in obv. 3, read *sun*. The reduplication would then indicate the plenteousness of the fructifying waters.

muš = ES for *giš*; *tuk* must mean 'give ear' = *šemû*, 5727. The suffix *-ta* appended here makes the whole clause dependent, as in rev. 20—21. We have a precisely similar construction in Turkish *dediklerinde* 'when they said' (*-de* = 'when').

12. In connection with *Nin-ki-gal* = *Allatu*, the goddess of the lower world, note that she was regarded as a representative of production as manifested in the earth.

mu-un-na-ni-me-en; lit.: 'he is (*mên*) to her' = *ni*; i. e., 'he is inclined towards her to do her will.'

13. *nam-ta-ê*(UD-DU) 'she cometh forth' (*ê* = *aĝû* 'go forth'). The *n*-prefix *nam-* is not necessarily negative.

14. *er*(A-ŠI)-*lib(m)-ma*; see Prince, JAOS. xxviii, 180.

With this colophon the hymn proper ends. Then follow seven lines of what appears to be additional addresses to the goddess, possibly the work of another hand.

15. *sal-zi-du* 'faithful lady;' *zi-du* for *zi-da* = *kênu* 'firm, faithful' occurs also IV, 28, 29a.

ga-man-ku-tin must mean 'may she (prec. *ga-*) endow it

(-man-) with life (*ku-tin*): *ku* = 'establish' + *tin* = *balātu* 'life,' 9853. This is the refrain of the next three lines.

mu-lu as subject here must mean 'she is the one who,' as *mulu* = rel. *ša* = 'who, the one who.'

In *nam-mu-un-zi*, we have again a *nam*-prefix which is clearly not negative, as in line 13, rev.

20. *ba-til-la-ta*, with suffix *-ta* = 'when,' as in rev. 11.

21. These lines close with an unfinished clause, indicating that they were probably jottings from a parallel hymn.

The Parsī-Persian Burj-Nāmah, or Book of Omens from the Moon.—By LOUIS H. GRAY, Ph. D., German Valley, New Jersey.

THE title of *Burj-Nāmah*. "Zodiacal Sign Book," is applied to a short Parsī-Persian poem "in 26 couplets, stating what the first appearance of the new moon portends in each sign of the zodiac" (West, in *Grundriss der iranischen Philologie*, ii. 128). It is contained on folio 64 of a most interesting collection of *riwāyats* and other Parsī-Persian material (for a partial list see West. *op. cit.*, pp. 123-128) preserved in a manuscript belonging to the University of Bombay (BU 29). "All the 26 couplets are written in double columns, and occupy three-quarters of folio 64*b*" (letter of Darab Dastur Peshotan Sanjana, Bombay, June 29, 1909). The whole manuscript is officially entitled "Revayet-i Darab Hormazdyar—Autograph of the compiler, written A. Y. 1048, A. D. 1679," and is bound in two volumes, the first containing folios 1-287, and the second folios 308-556. In view of the exceptionable value of the collection for students of Zoroastrianism, the following description of the codex, most kindly sent me by Fardunji M. Dastur, Registrar of the University of Bombay (Feb. 3, 1910), may well find permanent record here. "This Rivāyat was obtained for the Bombay Government at Bharuch by Professor Martin Haug in January 1864, and was shortly afterwards bound in two volumes. Originally, it must have contained 556 folios, each 10 1/2 inches high, 8 3/4 inches wide, and all written 21 lines to the page; but 47 of these folios were lost before 1864, namely folios 35-43, 160, 161, 288-307, 428-441, 535, and 540. The contents of folios 160, 161 were recovered, in 1893, from another MS. (W), formerly belonging to the Revd Dr. John Wilson of Bombay and now in the library of the Earl of Crawford at Wigan in Lancashire, which is descended from this MS. and was written in 1761-2 by Nōshirwān Bahrām of Bharuch. W is also an imperfect MS., as 55 of

its folios (corresponding with folios 65-107 of this MS.) have never been written; but all deficiencies of this MS. can be supplied from W, except the contents of fols. 535 and 540, which must have been lost before 1762. This MS., itself, is probably the original compilation of Dārāb Hormazdyār Frāmroz Kiyāmu-d-dīn (or Kawāmu-d-dīn) Kai-Ḳubād Hamjiyār Padam Sanjānah, and contains eleven colophons written in his name and varying in date from 20 April to 21 November, 1679, at which latter date the compilation was completed. His names and dates occur on 13 *a* 8-10, 30 *a* 11-15, 34 *a* (centre), 50 *b* (bottom), 78 *a* (bottom), 106 *b* (bottom), 108 *a* 5-6, 198 *b* 3-4, 484 *a* 4-7, 518 *b* 5-8, and 550 *a* 16-18; the dates of which are six years earlier than that of Dārāb's supposed original Rivāyat at Balsār mentioned in the *Parsī Prakāś*, p. 16. n. 3.¹ Other copies of Dārāb's Rivāyat exist in the Mulla Firūz Library, and in that of Dastur Dr. Jāmāsp Minochiharji, both in Bombay; and in some cases the arrangement of the contents varies, as appears from the catalogue of the Mulla Firūz Library (Bombay, 1873), pp. 172-178.²

In BU 29 the *Burj-Nāmah* immediately follows the *Mūr-Nāmah*, a similar list of omens to be drawn from the appearance of a snake on each of the days of the month. This *Mūr-Nāmah* I have already considered at some length in a paper which will appear in the *Hoshang Memorial Volume* now in press at Bombay; and the present contribution may, accordingly, be regarded as a continuation and supplement of my study of the "Snake Book."

The *Burj-Nāmah* goes back, as we have seen, to 1679, and it is probably of somewhat earlier date, for it is scarcely likely that Dārāb Hormazdyār, the compiler of the manuscript which has preserved it, was also its author. In my study of the *Mūr-Nāmah* I have suggested that the whole basal system of this sort of augural calendars may have been derived ultimately from Babylonia. Perhaps the same suggestion may be made in the case of the *Burj-Nāmah*, though whether the "astrological forecasts for the various months, taken from ob-

¹ Two more references to the *Parsī Prakāś* are given by West (*op. cit.*, p. 126), but the work is unfortunately inaccessible to me.

² This catalogue fails, however, to mention anything corresponding to the *Burj-Nāmah*.

pp. 438-439); and the impossibility of making any people particularly guilty for its introduction is shown, were such proof necessary, by its occurrence among the American Indians (Waitz, *Anthropologie der Naturvölker*, iii. 113, 383; see also Post, *Grundriss der ethnologischen Jurisprudenz*, ii. 391-392 for legislation against it among American Indians, Semites, and Aryans). Despite the statement of Herodotus and the prohibitions of the Avesta, however, I am inclined to doubt whether paederasty was wide-spread among the Persians until a much later period, which perhaps began with the Mohammedan invasion of Irān. That it was lamentably common among the Arabicised Persians is only too plain from the *Thousand Nights and One Night* (cf., for example, Payne's translation, ix. 69 sqq.). To some extent the practise formed part of the Babylonian cult (cf. the determined resistance to the קדשים in Deut. xxiii. 17-18, I Kings xiv. 24, xv. 12, xxii. 46, II Kings xxiii. 7), and this may perhaps have lingered on (possibly furthering, if not even more powerful than, the maleficent influence of Greece), to be still more enhanced by the sensuality of the Arab invaders. But on the other hand, India seems free from this vice, even so minute a scholar as Schmidt recording nothing regarding it in his *Beiträge zur indischen Erotik*.

This absence of paederasty from India, combined with the repeated mention of it in the *Burj-Nāmah*, makes it probable that the poem was composed in Persia, not in India, and that, as already intimated, Dārāb Hormazdyār was merely its compiler, not its author. How far previous to 1679 it was written is, of course, uncertain, but it may well be several centuries older, especially when it is remembered that the analogous *Mār-Nāmah*, contained in the same collection, occurs in principle in al-Bīrūnī's *Chronology of Ancient Nations* (tr. Sachau, p. 218), written in 1000 A.D.

For the text of the *Burj-Nāmah*, here published and translated for the first time, I am indebted to the courtesy of Darab Dastur Peshotan Sanjana, High Priest of the Parsis at Bombay, who, at my request, made the transcript for me from BU 29 in June, 1909. The text and its translation are as follows:

بنام ایند مسرین دادگر

- زلف خداوند روزی رسان
 بگویم زهر ماه نو میتوان
 زبرج حمل چو به بینی نو ماه
 بکن اندر آن دم بآتش نگاه
 گر آن ماه کارت بود خوبتر
 زکنتار دان کنون درنگر
 هم از تور بنگر به بینی گورا
 گر آن ماه بهتر بود مر ترا
 5 چو در برج جوزا به بینی نو ماه
 در آن وقت کن تو بزهر نگاه
 بپرهیز از کور واورا مبین
 گر باشدت آن ماه نیکوترین
 چو در برج خرجنگ بینی قمر
 زگفت حکیم این تو بشنو خبر
 در آن دم نظر کن بآب روان
 دگر سبزه را خوب یا اوروران
 زبرج اسد چو به بینی نو ماه
 تو بر آسمان کن زمانی نگاه
 10 بخواه حاجت از پاک پروردگار
 مبین کودک وزن توان نامدار
 چو در برج خوشه به بینی تو دان
 مبین تو چنان رودگر کن زدود
 زمضمون او بشنو من چنان¹
 بخواه دگر یزدان بصدق درست
 گر غمگین نکردی تو خود باوجود
 چو در برج میزان به بینی قمر
 در آینه وزرد را نرم نگر
 15 بخواه حاجت از کردگار جهان
 مبین چو مکره ای نامور
 تو بنگر ابام بنیکو نظر
 مبین چو در برج² قوس اندر آید قمر
 هم از برج جدی چو به بینی نو ماه
 20 تو منگر زبیمار وهم کودکان
 چو دلو در بینی همی ماه نو
 بخواه حاجت از قادر کردگار
 چو در برج ماهی به بینی تو ماه
 25 به بین و بشو شادمان انرمان
 همین است مار اکنون یا دار
 بوی شاد ونبود ترا خود زبان
 گر باشد نگهدار پروردگار

In the name of God, Compassionate, Omnipotent!

(1) By the grace of the Lord I shall tell, so far as possible, what the days bring according to each new moon.

حنا ۱۰۰

² Dastur Darab's transcript has بوس.

(2) When thou seest the new moon from the sign of Aries, at that instant gaze on the fire;

(3) If in that moon thy affairs should be better, consider (that to be) from the making of a grain-jar.¹

(4) Also from Taurus (when the new moon appears), gaze (and) look on a cow if this month is to be better for thee.

(5) When thou seest the new moon in the sign of Gemini, at that moment gaze on her shining;

(6) Beware of mirage and look not on water if that month is to be most good for thee.

(7) When thou seest the moon in the sign of Cancer, hark thou to tidings from the speech of this physician;

(8) Then look to the gate of the soul, though for verdure (this sign) is good, Auvarān(?).

(9) When thou seest the new moon in the sign of Leo, gaze a while upon the sky;

(10) Ask thy need of a pure king; look not, so far as possible, on boy or woman, O famous one!

(11) When in the sign of Virgo thou seest (the new moon), be wise from its meaning, harken to me thus:

(12) Look not on women (and) make thy musician of smoke.² unless thou wouldst make thyself particularly sorrowful;

(13) Recite thou praise of God with perfect sincerity if fortunate doings are to be in that new moon.

(14) When in the sign of Libra thou seest the moon, gaze on a mirror and on armour smooth;

(15) Ask thy need of the Creator of the world. Likewise of the sign of Scorpio I shall tell, so far as possible:

(16) Look on Scorpio with a good gaze; young man, in tradition it is not blind and not deaf;³

(17) Look not on an abominable object, O famous one, if with goodness that moon is to come to thee.

(18) When the moon enters the sign of Sagittarius, look straightway on silver and gold;

(19) Look not on the face of the sick then; be on thy guard that thou mayest be joyful.

¹ The meaning of this line, if I have rightly rendered it, is very unclear to me.

² *I. e.* of nothing; in other words, "have no musician."

³ The meaning of the allusion is unknown to me.

(20) When thou seest the new moon in the sign of Capricornus, straightway recite the *Ašm ahū* (*Ašəm rohu*) thrice;

(21) Look not on the sick and likewise (not) on boys, else wilt thou be unhappy in that month.

(22) When in Aquarius thou seest the new moon, recite the *Aytū ahū vair* (*Yāθū ahū vairyō*), listen unto them;

(23) Ask thy need of the mighty Creator; look not on boy or woman, O famous one!

(24) When thou seest the moon in the sign of Pisces, look straightway on gem and jewels;

(25) Look and be happy then; be happy, and it will not be harm to thee.

(26) Likewise is the snake now, O Creator, if the king be guardian.

Note on Some Usages of לָכֵן.—By J. M. CASANOWICZ,
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IN a former article in this Journal¹ a number of passages from the Old Testament were quoted in which ל is not a preposition but an emphatic particle, meaning 'verily'. Professor Haupt pointed out to me that this emphatic ל can also be traced in some cases of לָכֵן, which is then not a compound of the preposition ל and the adverb כֵּן, meaning 'thus'. = 'therefore', but of the emphatic ל and the adjective כֵּן, meaning 'verily thus', as, for instance, in Micah i, 14, or 'very well', as in Gen. iv, 15; xxx, 15; Jud. viii, 7; I S. xxviii, 2, while in some passages it is to be rendered by 'not so', 'but', 'yet' (= Arabic *lakin*).

In the following passages of the 176 in which לָכֵן occurs the adopting of an emphatic, instead of a causal or argumentative, meaning for it would seem to establish a better logical connection of the context.

לָכֵן 'verily'.

1. Is. xxvi, 14. מֵתִים בֹּל יִתִּיו רַפְאִים בֹּל יִקְמוּ לָכֵן פָּקֶדֶת וְתַשְׁמִידֶם וְתֹאבֵד כָּל זֵכֶר לָמוֹ. 'the dead will not live, the shades will not rise. Verily thou hast visited to destroy them and cause all memory of them to perish'. The difficulty of ל here in its usual causative or argumentative meaning was perceived by Delitzsch (*in loco*) and in Brown-Driver-Briggs in their Hebrew and English Lexicon, p. 487^a, who explain it (as also in Is. lxi, 7; Jer. ii, 33; v. 2; Job xxxiv, 25; xlii, 3) as 'inferring the cause from the effect, or developing what is logically involved in a statement'. But we would expect כִּי instead of לָכֵן. But taking ל in the emphatic meaning the second hemistich is an epexegetical climax of the first: They will not live. they will not rise: yea, or, to be sure, thou didst visit upon them a radical punishment.

¹ Vol. 16, *Proceedings*, pp. clxvi-clxxi.

2. Is. xxvii, 9. לֹכֵן בָּזֹאת יִכְפֹּר עוֹן יַעֲקֹב וְזֶה כֹּל פְּרִי הַסֵּר הַמָּאֹתוֹ וגו', vv. 7 and 8 read: 'Has he smitten it as he smote the smiter? Or was it slain as its slayers were slain? By aff-righting it, by sending it away dost thou contend with it; he drove it away with his rough blast in the dry of the east wind'. V. 9 then goes on to say: 'Verily by this—i. e., only in this way—will the sin of Jacob be expiated and this will be the fruit of removing his sin', &c. So also Grätz, *Monatsschr. für Gesch. u. Wissensch. d. Jdth.* 1886. 21, 'wahrlich'. However, the connection of v. 9 with the preceding and succeeding passages is rather loose, and it is possibly out of place here.

3. Is. lxi, 7. לֹכֵן בְּאַרְצָם מְשֻׁנָּה יִירָשׁוּ שְׂמֵחַת עוֹלָם תְּהִיָּה לָהֶם. If the reading of v. 6 in the MT. is correct, viz., 'For your shame ye will have double, and for confusion they (or, you) will rejoice over their (your) portion', ל introduces an emphatic parallelism: 'Yea, in their own land will they possess double and their joy will be everlasting'. See, however, the emendations of v. 6 by Oort (quoted in the critical notes to Kautzsch's translation) and Cheyne, *SBOT, Isaiah*, Hebr. edition, pp. 66 and 161.

4. Jer. v, 2. וְאִם חֵי יְהוָה יֹאמְרוּ לֹכֵן לִשְׁקֵר יִשָּׁבְעוּ, 'and though they say, As Jhvh lives, surely they swear falsely'. So the ARV. This makes unnecessary the adoption of an adversative meaning for ל here. Duhm (in Marti's *Kurz. Hdk.*) would change the 'sinnlose' לֹכֵן, after viii, 6, into לֹא כֵן or לֹא כֵן לִשְׁקֵר. But for swearing falsely נִשְׁבַּע is always combined with שָׁוָא or שָׁקֵר. In taking an oath it is not primarily a question of right or wrong, but of true or false.

5. Micah i, 14. לֹכֵן תִּתְּנִי שְׁלוּחִים עַל מִרְשֶׁת גַּת, 'thus thou must indeed give a parting gift to Moresheth Gath'. So Haupt.

6. Zach. xi, 7. וְאָרַעָה אֶת צֹאן לֹכֵן עֲנִי הַצֹּאן, 'so I fed the flock of slaughter, verily the poor of the flock'. So the RV. LXX, εἰς τὴν Χαρανθιν = 'לִבְנֵעֲנֵי הַצֹּאן'.

7. Job xxxiv, 25. לֹכֵן יִכְרֹם מַעֲבְדֵיהֶם וְהִפָּךְ לַיְלָה וַיִּדָּבֹאוּ, v. 24 reads: 'He breaks the mighty without an inquiry and sets others in their place'. ל introduces not the cause, but the reason of 'without inquiry': 'Verily he knows their works (sc., without inquiry), and so he overturns them in the night so that they are crushed'. So Vulg.: novit enim opera eorum; LXX: ὁ γνωρίσων αὐτῶν τὰ ἔργα, omitting ל.

8. Job xlii, 3. מִי זֶה מַעֲלִים עֲצָה בְּלִי דַעַת לֹכֵן הִנֵּדְתִּי וְלֹא אָבִין, 'mi

נִפְלְאוֹת מִמֶּנִּי וְלֹא אָדַע, 'who is this that hides counsel without knowledge; thus indeed I have uttered that which I understood not, things too wonderful for me, which I knew not.' Kamphausen (in Bunsen's Bibelwerk), 'nay' ("ja"); Budde (in Nowack's Hdk.) strikes 3^a to avoid the difficulty of the ל', while Duhm considers it a marginal gloss. LXX: *τίς δὲ ἀναγγελεῖ μοι* = כִּי מִי יִגִּיד לִי.

לָכֵן, 'very well', 'all right'.

9. Gen. xxx, 15. וְתֹאמַר לֶהּ הַמַּעַט קָחְתָּךְ אֶת אִישִׁי וְלִקַּחְתָּ גַם אֶת בְּנִי וְדִנְיָא בְנִי וְתֹאמַר רַחֵל לָכֵן יִשְׁכַּב עִמָּךְ הַלַּיְלָה תַּחַת דּוּדָאֵי בְנִי, 'and she (Leah) said unto her, Is it not enough that thou hast taken away my husband, that thou also takest away my son's love apples? And Rachel said, Very well, he shall lie with thee to night for thy son's love apples. LXX: *οὐχ οἷτος*, while Vulg. omits ל'.

10. Jud. xiii, 7. וַיֹּאמֶר גִּדְעוֹן לָכֵן בָּתָּת יְהוָה אֶת זִבְחָהּ וְצִלְמַנֶּע בִּידֵי וּרְשָׁתִי אֶת בְּשָׂרְכֶם אֶת קוֹצֵי הַמְּקָבֵר וְאֶת הַבְּרִקָּנִים, v. 6 reads. 'And the princes of Succoth said, Are the hands (properly, palms) of Zebah and Zalmunna in thy hands, that we should give bread to thy hosts?' And Gideon said, Very well, when Jhvh will have given Zebah and Zalmunna into my hand I shall thresh your flesh with thorns of the wilderness and with briars.' So also Kautzsch and Nowack: 'Nun gut'.

11. I S. xxviii, 2. וַיֹּאמֶר דָּוִד לָכֵן אַתָּה תִּדְעַה אֶת אֲשֶׁר יַעֲשֶׂה עִבְדְּךָ, v. 1^b 'and Achish said unto David, know thou assuredly that thou wilt go with me into the campaign, thou and thy men?' 'And David said unto Achish, Very well, thou wilt learn what thy servant will do.' Kautzsch and Nowack: 'Gut nun'. LXX: *οὕτω νῦν γινώσκῃ*; Vulg.: nunc etiam (עֵתָה for אַתָּה). The meaning of 'verily' or 'surely' (so AV.) for ל' would also be proper here.

לָכֵן, 'not so', 'but', 'yet'.

12. Gen. iv, 15. וַיֹּאמֶר לוֹ יְהוָה כָּל הָרֹג קִין שִׁבְעָתַיִם יָקָם, v. 14^b. 'and I will be a fugitive and wanderer on the earth, and it will come to pass that whosoever finds me will slay me.' 'And Jhvh said to him, Not so, whosoever slays Cain vengeance will be taken on him sevenfold.' LXX: *οὐχ οἷτος*; Vulg.: nequamquam. Tuch, 'dennoch', 'aber doch'.

13. Jud. xi, 24. וַיֹּאמְרוּ זִקְנֵי גִלְעָד אֶל יִפְתָּח לָכֵן עָתָה שִׁבְנוּ אֵלֶיךָ, v. 7, 'and Jephthah said unto the elders of Gilead, Did not you hate me and drive me out of my father's house, and why have you come now when you are in distress?' 'And the

elders of Gilead said unto Jephthah, But now we have turned again to thee.' Kautzsch: 'Ja'. Still, the argumentative meaning of 'ל' would here also be in place: 'therefore', *i. e.*, either because we want to make good the wrong done to you by us (Nowack), or because we are now in distress (König, *Histor.-Compar. Syntax der Hebr. Spr.* § 373 p.).

14. Is. x, 24. לָכֵן כֹּה אָמַר אֲדֹנֵי אֱלֹהִים צְבָאוֹת אֵל הַיָּרָא עָמִי יֵשֶׁב, v. 23 'for a strict decree of destruction will the Lord God Sabaoth execute upon all the land'. 'Yet, thus says the Lord God Sabaoth, Fear not my people who dwell in Zion because of Asshur, etc.'

15. Is. xxx, 18. וְלָכֵן יִחַפֵּה יְהוָה לְהַנָּנֶכֶם וּלְכֹן יָרוֹם לְרַחֲמֵכֶם כִּי אֱלֹהֵי, v. 17, 'thousand at the war-cry of one, and the war cry of five shall ye flee, till you are left like a pole on the top of a mountain and like a signal on a hill.' 'And yet, Jhvh waits to be gracious to you, and yet, he rises to show mercy to you, for a God of right is Jhvh,' etc.

16. Jer. xxx, 16. לָכֵן כָּל אֲכָלֶיךָ יֵאָכְלוּ וְכָל צָרֶיךָ כָּלֵם בְּשָׁבִי יִלְכוּ, v. 15^b, 'thy pain is incurable on account of the multitude of thy iniquities; because thy sins were multiplied have I done these things to thee.' 'But all they that devoured thee will be devoured, and all thy adversaries will everyone of them go into captivity.'

17. Hos. ii, 16. לָכֵן הִנֵּה אֲנִי מַפְתִּיחַ וְהִלַּכְתִּיָּה הַמְּדַבֵּר וְדִבְרָתִי, v. 15^b, 'and she went after her lovers and forgot me.' 'But behold, I will prevail on her, and will lead her into the wilderness and speak to her heart.'

In Ezekiel, with his tendency to lengthy, discursive arguments, the function of לָכֵן seems sometimes to be to sum up and clinch as it were such an argument¹; so perhaps xviii, 30; xx, 30; xxiv. 6; xxxi. 10; xxxvi, 22; xxxix. 25.

¹ Similar to לָכֵן, cf. vol. 16, p. clxvii f.

Mythological Aspects of Trees and Mountains in the Great Epic.—By E. WASHBURN HOPKINS, Professor in Yale University, New Haven, Conn.

I. Trees and Divine Groves.

Lists of trees are frequently found in the Great Epic, as in 1. 63. 43f; 1. 207. 41f; 3. 24. 17f; 3. 64. 3f; the last two with groups of birds and animals, respectively. But these lists are for poetic effect only, as a single tree often serves the same purpose. Thus the hero is as conspicuous among his comrades "as a great Śāla-tree on a river's bank," 3. 35. 25. Or he streams with blood and so "shines like a budded Aśoka-tree in spring" (*vasante 'śokavṛkṣavat*), 7. 131. 51, or "like a sandal-tree (reddened) with its own sap," 7. 116. 12, or, commonest of images, "like a flowering Kimsuka-tree," e. g. 7. 96. 17—18. In 5. 179. 31, Rāma is (both) "like an Aśoka at the end of winter, (and) like a flowering Kimsuka," and a double image is sometimes employed to liken a bleeding hero to a Kimsuka and at the same time to a tree surrounded with fire-flies (as the sparks come from his blade) at the eve of the rainy season (*varṣāpradoṣe*), 7. 15. 18f. The blood-red Kovidāra-tree also serves this purpose, SI. 7. 97. 9, while like the "five-year-old Mango-grove felled when fruit-laden" is the fall of heads on the battle-field. 7. 45. 27 (*cūtārāmo yathā bhagnah pañcavarṣaḥ phalopagaḥ*). From the mythological point of view such references are valuable chiefly in what they lack, namely any indication that the trees so frequently mentioned are holy. In fact, many trees are known only as useful, like the Pilu-groves of the Punjāb. 8. 44. 31, on which, as on the Śamī and Īṅguda (nuts), it is said that camels are fattened, 2. 51. 4; though the Śamī, is a holy tree, being the birth-place of Agni, 13. 85. 44, and use itself contributes to holiness. Thus the "great tree at whose foot the king sits" is described as *punṇadhara*, or "bestowing good" in a religious sense. 3. 24. 24.¹

¹ N. says it is a Kadamba-tree. It is described as *latāvatānāvānataḥ* (bent under its canopy of creepers), a phrase perhaps borrowed from R. 5. 16. 28.

Of tabu-trees there are a number.¹ Thus only sinners make a free use of Pālāśa (*butea frondosa*) and Tinduka wood for seats and tooth-picks, respectively, obviously because they are sacro-sanct, 7. 73. 38. The last mentioned tree it utilized (as are others) to point a moral. It is productive of a short fierce blaze and a sluggish coward is exhorted to imitate this: "Better to blaze for a moment than smoulder long" (*alūtaṁ tindukasyeva muhūrtam api hi jvala*) 5. 133. 14f. Similarly, the Śālmali-tree is an image of mortals' (inconstant) thoughts, "tossed by the movement of the wind like the seed of the Śālmali", 5. 75. 19, etc. The Śāla is opposed to the creeper as strength to weakness, 5. 37. 63 (said of the heroes and their foes), and the same image gives the epic equivalent of *noblesse oblige*: "As the Syandana-tree, though slight in size, is able to endure much, so a noble family sustains a weight not to be borne by inferior people." 5. 36. 36; with another image following a few verses later: "Even a great tree cannot withstand a great wind. while many by being united together (in a grove) endure the hurricane," ib. 62 (*śighratumān vātūn sahaṁte 'nyomyasamśrayāt*). Compare 12. 154. 4f.

But of ordinary (not supernatural) trees, some are distinctly "revered." The most general case is the "one tree in a village", because it is not specified of what sort it is. Standing alone it affords shade and a resting-place and for this reason it is a *cūṭiya arcanīyaḥ* and *supājītaḥ*, that is, "revered and honored" (like a divinity; *grāmudruma*, 1. 151. 33). The *cūṭiya-vṛkṣa* is thus an image of the grandeur of Garutmat, the heavenly bird, 2. 24. 23. Yet only one such tree is noticed in the texts, the famous Akṣaya-vaṭa of Gaya.² Trees suit-

¹ The names of a number of trees whose fruit must not be eaten are given in 13. 104. 92. Their use as food is tabu, *pratiśiddhānna*. These are the *pippala* or *figus religiosa*, the *vaṭa* or *figus indica*, the *śaṇa*-tree (*cannabis sativa*), the *śāka* or *tectona grandis*, and the *udumbara* or *figus glomerata*. A list of unguent-making trees is given just before. *priyaṅgu*, sandal, *bilva*, *tagara*, *kesara*, etc., 13. 104. 88. In 13. 98. 39 are mentioned woods to make *dhūpa* (incense). The *Śamī*, *pippala*, and *pālāśa* are especially spoken of as *samidhas*, wood for making sacrificial fire, and are mentioned along with the *udumbara*, 12. 40. 11. In 13. 14. 58. ascetics live on the fruit of the *Aśvattha*, though this is a tabu-tree (= *Pippala*). It represents the male element in the production of fire, *versus* the *Śamī*.

² This is mentioned several times, yet not as a tree in itself undying, but as conferring deathlessness, *akāyakaṛaṇa*, or as making endless the

able for an asylum of Saints are enumerated in 13. 14. 46 f.¹ All *cūitya* trees are homes of spirits. 12. 69. 41 f.

It is to be noticed that the tree called Bhāṇḍīra, the holy Nyagrodha of Vṛndāvana. is mentioned in the early epic only in the South Indian recension, at 2. 53. 8 f. The famous Khadira is known as a tree used for staking moats. 3. 284. 3.

The *ficus religiosa*, Pippala or Aśvattha-tree (the sun is called the *aśvattha*, i. e. life-tree) is the chief of all trees, 6. 34. 26, and typifies, with its roots above and its branches below, the tree of life, rooted in God (above), 6. 39. 1 f. He who daily honors this tree worships God (Viṣṇu is identified with nyagrodha-udumbara-aśvattha, 13. 149. 101). 13. 126. 5 (it is as holy as a cow or *rocana*, ib.). The four Vedas are "word-branched Pippal trees", 7. 201. 76.

On the other hand, the Vibhītaka-tree stands in disrepute as an unholy tree (see 3. 66. 41, entered by Kali); while, in general, "from one and the same tree are produced evil and good" (only SI. 5. 33. 22, *ekasmād vāi jāyate 'sac ca sac ca*). This refers to implements etc. made of the tree, for harmful or for religious purposes. The sin of Indra. divided among trees, rivers, mountains, earth, and women, 5. 13. 19, etc., seems to have had no effect upon the holiness of trees in general. The "tree of good" and "tree of evil" are metaphors. The hero of the epic is a "great tree of virtue," whose trunk and branches are his brothers, though as with the Aśvattha (above) the roots are here divine (*brahma*; but also the Brāhmaṇas). He is thus opposed to the "tree of evil," the foe, as the Śāla to the vine, 5. 29. 53 and 56.² Cf. *kāmadruma*. 12. 255. 1.

Magical trees are for the most part supernatural, either

offering there given to the Manes. It marks the place where the Asura Gaya fell, or his sacrifice; 3. 84. 83; 87. 11; 95. 14; 7. 66. 20; 13. 88. 14 (proverb); R. 2. 107. 13; my Great Epic, 83, n. 2.

¹ *dhava-kakubha-kadamba-nārikelaḥ kurubaka ketaka-jambū-pātālābhīḥ*
vaṭa-varuṇaka-vatsanābha bilvāḥ sarala-kapittha-priyāla-sāla-tūtāḥ
 (47) *badarī-kunda-punnāgāḥ asoka-mra-timuktakāḥ*
madhukāḥ kovidārāḥ ca campakāḥ paṇasāḥ tathā
 (48) *vanyāḥ bahuvīdhāḥ vṛkṣāḥ phalapuspapradāḥ yutam*
... kadaliṣaṇḍaśobhitam (kṣetram tapasīm . devagandharvasevitam).

² In this place occurs also the common figure of the wood and the tiger, which mutually protect each other, 5. 29. 54 f.; also ib. 37. 46; and of the lion, ib. 37. 64. The "wood-dwellers", it may be remarked, are, unless qualified as saints, hermits, etc., simply "robbers" 7. 55. 5, etc.

belonging to unearthly places or to prehistoric times, though of course plants that instantly heal wounds are in the hands of the wiseacres. Compare for example, 6. 81. 10: "Thus speaking he gave to him a fine wound-curing strength-endowing plant and he became free of his wounds." The Śleṣmātaka (fruit) stupifies: *śleṣmātakī kṣīṇavarcāḥ śṛṇoṣi* (you fail to understand), the commentator says that to eat the leaf or fruit dulls the intellect, 3. 134. 28. But medicinal plants belong especially to the mountain of plants (whence aid was brought to the brother of Rāma) Gandhamādana (below), and the epic gives a special list of trees that grow on this favored mountain in the Himālayas, 3. 158. 43 f. (*saptapatra*, etc.). In this realm of plants and vines, mythology is almost absent and even philosophy scarcely more than affirms that plants are sentient. but "they know not where their leaves are," 12. 251. 8.

There is an implicit denial of any active belief in the action of Karma ever resulting in a man being reborn as a vegetable; the worst he has to fear being re-birth as an insect, a demon, or a low savage. But vines and insects serve the poet better than the metaphysician and here the vines are Love's arrows and ear-rings, and the bees are like Love's arrows (*tilakāṁś tilakān iva*, trees were the *tilaka*, forehead marks, etc.) 3. 158. 66 f.

That trees were sentient beings is philosophically proved in 12. 184. 10 f.; but the tales of the earlier period assume this. Thus in the account of Bhagiratha, the text of the South Indian recension says: "The trees, turning toward him with their faces, stood bowed down, wishing to go after their lord", SI. 7. 16. 14.¹ It is true that in 3. 230. 35, the "mother" of the trees is kind and gives boons and is compassionate, so that those who wish sons revere her in a Karañja-tree, where she has her abode, while under a Kadamba-tree is worshipped Lohitāyani, 3. 230. 41, the daughter of the Red Sea, and nurse of Skanda; and there can be no doubt that these goddesses are dryads, not so much divine trees as spirits in trees. They are vegetal divinities, but, like many other divinities of like nature, they are savage and eat human flesh and are compassionate only when appeased by offerings. The name given to them (only here!)

¹ B. has "the trees here going after him, the lord, king (*rāja*, sic) wish to arrive there where the two space-devourers Makha-Mukhāu went." In 12. 269. 24 f., trees desire and attain heaven.

is Vṛkṣikās, dryads, and they are described as "goddesses born in trees who must be worshipped by those desiring children."¹

Nevertheless, this Buddhistic attitude is off-set by a few passages, such as that already cited, in which not spirits in trees but the trees themselves act, think, speak, etc., undoubtedly a more primitive thought than that of a spirit in the tree. Thus in the age of Pṛthu Vāinya, "when people lived in caves and trees," not only were all the trees good, so that clothes pleasant to touch and wear could be made of their bark, 7. 69. 5 and 7 (*vṛkṣāḥ* in SI.), but the trees personified came to Pṛthu Vāinya and begged a boon of him, whereupon he commanded earth to milk out their wish, and the trees rose first to milk earth, so that the Śāla became the calf, the Plakṣa-tree the milker, and the Udumbara the vessel, 7. 69. 10 f. Or, if this seems too mystic to be primitive, one could appeal to the tree-marriage. In 3. 115. 35 f. (cf. 13. 4. 27 f.), two wives want children and embrace trees, one a Pippala and the other a fig (Aśvattha and Udumbara), at the proper time, and also (it must be said) take medicine. The trees, however, are exchanged, so that the woman who should have had a warrior son from the heroic tree bore a priestly son, and the priest's daughter, who wanted a saintly son, got a fighter; through embracing the Aśvattha instead of the Udumbara.

The "trees of gold", which one sees with disastrous results in a dream, seem to be connected with the idea expressed at 5. 46. 9 in the words "the tree of ignorance has golden leaves". As it is elsewhere expressed "Him whom the gods wish to destroy they make mad; (so that) he sees things upside down," and "he who is to die sees things inverted; he sees golden trees," that is, to see trees of gold is to share in the more general delusion of seeing things inverted or turned about, the sign of madness precedent to death.²

More particularly, to see golden trees in a cemetery presages death. In 3. 119. 12, "On committing this crime he saw golden

¹ 3. 231. 16 (*vṛkṣeṣu jātāḥ*; hence *vṛkṣikāḥ* with SI. better than the *vṛddhikā nāma nāmataḥ* of B.). "Tree-girded Śiva," 7. 202. 35, is in SI. still more emphatically "the tree" (epithet of Śiva), SI. 7. 203. 32.

² A parallel *marāṇacīḥna* occurs in R. B. 3. 59. 16: "He that is about to die smells not the expiring lamp, hears not a friend's word, sees not Arundhatī" (a star). Cf. AJP. 20. 23, and add R. 2. 106. 13; 3. 30. 15; Mbh. 12. 322. 44. "House-grown" trees are forbidden, 13. 127. 15.

trees in full bloom on the earth of the Pitr-world (cemetery)", *cāmīkarābhān kṣitijān . . pīṭylokabhūmāu*. But the addition of the significant cemetery is not necessary. In 6. 98. 17. *mu-murṣur hi naraḥ sarvān vṛkṣān paśyati kāñcanān*, "he that is about to die sees all trees golden" (the moral: so thou wilt die because thou seest things wrong. *vīparītāni*).

The later epic lays a good deal of stress upon tree-worship, doubtless reviving old practices as well as bringing in new ideas. Not only is Śiva identified with the *bakula*, the sandal-wood tree, and the *chada*-tree, 13. 17. 110 (the last is the *saptapatra*, N.), and with the world-tree (ib. N.), and especial efficacy attributed to the grove of Deodars, ib. 25. 27 (from the wood of this tree the sacrificial posts are made, according to epic tradition); but the mere planting of trees is extolled as a meritorious act calculated to insure the planter "fame on earth and rewards in heaven," ib. 58. 24, since such planting "saves one's ancestors" and "gods, saints, and demigods have their resort in trees," ib. 26 and 29. On the other hand, one who cuts down the lords of the forest on the day of the new moon is guilty of Brahman-murder, 13. 127. 3. One should offer a lamp to a *karañjaka* tree, holding in his hand the root of the *suvarcalā*, the latter being both the name of a plant and of the Sun's wife, if he desires offspring, ib. 123. 8.

Besides other wonderful trees there are five trees of Paradise which the epic writers regard as capable of being transplanted to earth. Thus the heavenly tree called Pārijāta was seized by Kṛṣṇa and carried off by him in defiance of Indra, whose defence was useless, 5. 130. 49. In Har. 7168 f., this tree is identified with another heavenly tree, the Mandāra; but in 7. 80. 30 the latter appears to be an independent tree on Mount Mandara. The Nāirṛtas in the north country guard the Saugandhika-vana (cf. *punḍarikavanāni*, 7. 97. 7) in the same way as the gods guard their sacred trees in heaven, and the trees there are called *santānakās* (*nagās*) or immortal trees, distinct from the remarkable Kadālī-trees which also grow on the grassy places of the favored region, 5. 111. 12 f. Bloody bodies in battle are likened to Pārijāta-vanāni in 7. 187. 34 (red); but the heavenly trees are not described in detail. Even the earthly banyan is figured only by allusion and implication, though it is probably the model of the "hundred-branch tree" to which Drupada is likened because of his

numerous descendants, 5. 151. 14. But magical trees are not confined to heaven. In the land of demons, Dāityas, in the town called Hiranyapura, there are also "trees that bear fruit and flowers at will and go at will," 5. 100. 15. Many even of the sacred asylums on earth have trees which grant wishes. Thus in the Alamba-tirtha the trees grant wishes, 1. 29. 40, and other trees there have branches of gold, silver, and beryl; one of the banyans being the resort of the little Vāḷakhilya saints, who hang from the branches head down, 1. 30. 2. On the Utsava hill there are also Kalpavṛkṣas (wish-granting trees), 1. 219. 3, though this is an artificial creation. Just as Indra has a *kalpalatikā*, or magic vine granting every wish, so the *kalpa*-tree grants wishes. This is so well known (though rarely referred to) as to introduce a simile in 3. 281. 5: "though adorned with care he seemed less like a (beautiful) *kalpa*-tree than like a *cāitya*-tree in a cemetery," *na kalpavṛkṣa sadṛśo.. śmaśānacāityadrumavut*. Cf. 8. 94. 44. and the *kapparuḅkko*.

The trees of earthly districts almost merge with those of heaven, as one climbs the mountains to the upper world; but in those divisions of earth known as Dvīpas are to be found similar trees, and where it is etymologically possible the local tree is adored by the inhabitants. Thus in Śāka-dvīpa the Śāka tree is worshipped, 6. 11. 28.

Of the divine trees three or four are specially prominent. The grove of Kadali-trees seen by Bhīma on Mt. Gandhamādana is leagues in extent and the grove is "golden" and divine. It lies on the way to heaven, a narrow path, on which the hero is stopped by Hanumat, to prevent his being cursed. But he discovers that this golden grove of plantains, pisang trees, *kadalisaṇḍa*, conceals the further end of the "road to the world of the gods", *devalokasya mūrgaḥ*, 3. 146. 51, 58, 68. 93. Seven trees are "kings," 14. 43. 3.

East of Meru, 6. 7. 14 f., in Bhadrāśva-dvīpa, there is a great mango-tree which always bears fruit and flowers and is a league high. It is frequented by Siddhas and Cāraṇas and its juice gives immortal youth, ib. 18 (the Kālāmra-tree). The name of the Dvīpa Jambū, is derived from the Jambūvṛkṣa, located "south of Nīla and north of Nīśadha" (mountains), called Sudarśana, an eternal tree which grants all desires and is frequented by Siddhas, etc. It is one thousand and one hundred leagues in height and touches the sky; its fruit being

measured by fifteen and ten hundred cubits (2500 *aratni*). Its juice makes a river which flows around Meru to the Northern Kurus. The red gold used for gods' ornaments, like *indrāgo-pas* in color, comes from it and is hence called *jāmbūnada* (red gold). 6. 7. 20-26.

As the juice of this tree makes a river, so the Ganges itself, which among the gods is called *Alakanandā* (*Alaka* is *Kubera's* city, and *Alaka* designates an inhabitant thereof, 3. 162. 13) has its source at the great jujube-tree which grows on Mount *Kāilāsa*, *mahānadi badarīprabhavā*, revered by gods and seers as well as by the aerial Saints called *Vāihāyasas*, and by *Vālakhilyas*, and *Gandharvas*, 3. 142. 4 f. The tree grows beside the Ganges, according to 3. 145. 51 and is reached only by a long journey through many districts of northern *Mlecchas* and hills inhabited by *Vidyādhara*s, *Vānara*s, *Kinnara*s, *Kimpuruṣa*s, *Gandharva*s, and *Cāraṇa*s (so *SI.* 3. 145. 16), till one gets to the asylum of *Nara-Nārāyaṇa*, which is full of "heavenly trees," i. e. "always bearing fruit and flowers," on Mt. *Kāilāsa*. The *Badarī*-tree is huge, with a thick trunk and its boughs afford constant shade. It is of incomparable beauty and its fruits are sweet as honey. The rest of the description is the usual picture of heaven. There are no mosquitoes or gnats; the grass is blue (*nīlu*) and soft as snow. The "songs of glad birds" resound. There is an absence of thorns, darkness, sorrow, hunger, thirst, cold, heat; but the place is full of sacrificial glory and holy beauty, *brāhmyā lakṣmī*, though it had no light from the sun. The *badarī* is the most important of the many "divine trees" found there, *ib.* 27 f. As *Śāka-dvīpa* has its tree of wonders worshipped by the inhabitants, 6. 11. 27; so *Śālmalika-dvīpa* has a *Śālmali*-tree, 6. 12. 6. This tree also is worshipped, just as Mt. *Krāuñca* is worshipped in *Krāuñca-dvīpa*, *ib.* 7.

These last passages already reveal the close connection between the trees divine and the mountain heights, and more particularly show that the idea not only of a divine tree but of a divine grove was as familiar to the Hindu as to the Assyrian, German, or Roman. Such a grove, called *vanam divyam*, or *devāranyāni* (plural, 5. 14. 6; 186. 27), *devodyāna*, *upavana*, *vanānta*, *kānana*, *ārāma*, *nandana*, etc., is not only sacred to the gods but is where the gods themselves perform religious rites. In 3. 118. 9 f., *Yudhiṣṭhira* journeys from *Śūr-*

pāraka past a place by the sea and arrives at the sacred grove where the gods practiced austerity. There he sees the *āyatanāni* (templa) of Ṛcika's son and of the Vasus, troops of Maruts, Aśvins, Vāivasvata (Yama), Āditya, the lord of wealth, Indra, Viṣṇu, lord Savitar, Bhava, Candra, the day-maker, the lord of waters, the troop of Sādhyas, Dhātār, the Pitrs, Rudra with his troop. Sarasvatī, the troop of Siddhas, "and whatever (other) immortals" (there are).

2. Mountains.

The shrines but not the gods are found in this lowland place. The gods dwell upon the "ownerless". (13. 66. 36) mountains, the high places; and it is significant that it is not upon the Seven Hills of the more southern district but chiefly on the thousands of hills of the northern country that one finds the gods.¹ Bhārata-land comprises the Seven Hills.

It is said in 3. 39. 40 that "the assembly of gods, *tridaśānām samāgamah*, is found on the best of mountains" (Himavat); and in 7. 54. 25, "The gods of old made sacrifice on the top of Himavat." When Nahuṣa, as king of the gods, *devendru*, sported in "all the parks and pleasure-groves" familiar to the divinities, he lived "in Kāilāsa, on the top of Himavat, on Mandara, the White Mountain, Sahya, Mahendra, and Malaya," as well as by seas and streams, 5. 11. 11f. But when the Pāṇḍus go to seek the gods they travel to the northern districts to "divine Hāimavata, holy, beloved of Gods," 3. 37. 39. It is in the northern mountains also that one finds the most famous shrines of the saints. The Agastya-vaṭa (but also Mt. Kuñjara), Vasiṣṭha's mountain, *parvata*, and the still more renowned Bhṛgu-tuṅga, are visited by Arjuna in the Himā-

¹ The Seven Hills of TS. 6. 2. 4. 3 (where, 3. 4. 5. 1, Viṣṇu and not Śiva is "overlord of the hills") remain in epic tradition as the seven Kulaparvatas, 6. 9. 11 (cf. the seven mountains in Śāka-dvīpa, 6. 11. 13). They are perhaps the "seven doors of heaven", TB. 3. 12. 2. 9. They comprise the Orissa chain, Mahendra; the southern part of the western Ghāts, Malabar (Malaya); the northern part of the western Ghāts, Sahya; Śuktimat (location in the east but doubtful); the Gondwana range called Bear-mountain, Rkṣavat; the (eastern) Vindhya; and the northern and western Vindhya, Pāriyātra. In SI. (only) 4. 3. 36, Arjuna is called "the eighth mountain", implying the same ordinary number of mountain ranges. Among the Seven Hills, Mahendra is best known as a holy place, 1. 215. 13; 3. 85. 16f. (Rāma-tīrtha). Twelve mountains are "kings," 14. 43. 4.

layas, 1. 215. 1 f. (with *tuṅga* cf. *ṭaṅka*, mountains-slope. only in the pseudo-epic).

The mysterious element comes to the fore in the description of one of the holy places in the hills: "Clouds arise without wind to bring them; stones fall; the wind is always blowing and ever rains the god (*nityam devaś ca varṣati*). One hears a sound as of reading but (the reader) is not seen. A fire burns there (of itself) both morn and eve. Flies and mosquitoes interrupt devotion. Melancholy is born there and a man longs for his home", 3. 110. 3 f.¹

A religious explanation of these phenomena is essayed by the traveller's guide. The gods do not like to be seen and so they made this place, which is their resort, inaccessible. It is on Hemakūṭa (Rṣabhakūṭa). When the gods "gather at the river" (Nandā is its name), only a great saint may ascend the mountain. For here the gods sacrifice. The grass is sacred (*kuśu*) grass and the trees grow like sacrificial posts and are used as such by the gods. "Here with the saints live ever the gods and it is their sacred fire which burns morn and eve. On bathing here all sins are destroyed," *ib.* 15 and 18. The weird sounds, however, have an historical explanation. The great saint Rṣabha, who lived in this holy place, was once disturbed in his meditations by a party of tourists, which made him very angry and he gave orders to the mountain: "If any man speaks in this place, throw stones at him and raise a wind to stop his noise," *ib.* 9 f. Hence came the universal rule that one should keep silence in the presence of holiness. "Sit thou down in silence" (*tūṣṇīm āssva*), says Lomaśa, 3. 114. 16, "for this is the grove divine of Brahmā" (the Self-existent). But mountains in general are holy and have a purifying effect, according to 12. 36. 7 and 264. 40.²

The myths of the mountains imply for the most part that they are living beings and of course divine. With other divinities the rivers, seas, and mountains approach and adore Śiva, 13. 14. 399; or Indra, saying "hail to thee", 5. 17. 22.

¹ *ib.* 6: *nirvedo jāyate tatra gṛhṇī smarate janāḥ*. In the beginning of the description another reading is: "With the sound (of speech) clouds arise". For volcanic mountains, see 8. 81. 15.

² Among *puṇyāni* are *dharanībhr̥tas* ("earth-holders"; the hills uphold earth) and bathing and visiting the places of the Gods, *devasthānābhigamana*, 12. 36. 7. Mountains assist at a sacrifice, *ib.* 321. 182.

So, conversely, a human being is represented as revering Mt. Rāivata and all (other) divinities and as "walking the deasil" around the mountain, 1. 220. 6. Compare 14. 59. 4f. and the adoration of mountains and trees, in 13. 166. 31f. In another passage it is said that the local mountain is revered by offerings of flowers and perfumes and cars (? *supraṭiṣṭhita*), 2. 21. 20, although here Cāityaka, one of the five hills surrounding a town, is revered rather as a memorable place. There the minotaur, *māṁsāda ṛṣabha*, which destroyed the inhabitants, was slain by Brhadratha, who (perhaps with the help of the propitious mountain) killed the monster and made three drums of its hide, ib. 16f. Possibly the fact that the hills are represented as running red with metal, *dhātu*, or chalk washed down in the rainy season may have helped in personifying the mountains as bleeding beings (with whom bleeding men and elephants are often compared), but even this was not necessary in a land where everything was alive.¹

One hill in particular, said to be five (or) six thousand leagues in height, is called "garlanded," Mālyavat, but it is garlanded with the *saṁvartaka* fire, and here reside those who have fallen from the world of Brahmā. They precede Aruṇa and then enter the moon after 66000 years, 6. 7. 28. It runs off to east and west into little hills called (uniquely) *gaṇḍikās* (*pūrvapūrvānugaṇḍikās* and *aparagaṇḍikās*, 6. 7. 28f. The title of Himavat as "Guru of mountains," *śāilaguru* (rare and late), 9. 51. 34, of itself imparts personality to the mountain. So a mountain begets children upon a river, 1. 63. 35f. Here the mountain, Kolāhala, is expressly said to be "gifted with intelligence," *cetanāyuktaḥ*. His daughter was called Girikā. Mountains speak, 12. 333. 30; as an echo, 334. 25.

On the assumption that mountains are alive rests one of the oldest legends in regard to them. RV. 2. 12. 2, *yaḥ pṛthivīm vyathamānām adṛmhat yaḥ parvatān prakupitān aramṇāt* ("Indra made firm the shaking earth and brought to rest the excited mountains") is explained by the legend narrated in MS. 1. 10. 13: *teṣāṁ indraḥ pakṣān acchinat tair imām adṛmhat* ("Indra cut off the wings of the mountains and made earth firm"). In the epic, "like the mountains with wings out off"

¹ Compare 7. 93. 36. *adṛśyantā 'drayaḥ kāle gaurikāmbusavā iva (gaurikādi-*, 6. 78. 28, etc.); *dhātūn*, 3. 158. 94f.; 6. 93. 37, and often. N. takes *mahādhātu*, 13. 17. 118. as Meru (epithet of Śiva).

is a standing simile, e. g. 6. 93. 36. That the old legend is in mind is shown by the addition of the words "of old," as in 7. 26. 65, where an elephant is likened to "a winged mountain of old"; and ib. 37, a fight of elephants "resembles that of two mountains of old, winged and wooded." But at present it is "something unknown that hills should move," 7. 103. 6.

Historically interesting is the fact that in times of distress (Kali, as reflecting history) the upper castes, when over-taxed, as an alternative to serving a Śūdra king take refuge in mountain-caves, *girigahvana*, not (apparently) artificial but the common resort of tigers and other wild animals, 3. 190. 61; 7. 107. 12 (of animals), as well as of Mlecchas, who in 7. 93. 48 are described as habitually living in caves, *girigahvanavāsinaḥ*. They are here savages, like those of the north, Pārvatiyas, who fight with stones, an art unknown to the Kurus, 7. 121. 33. In the history of Sunda and Upasunda it is said that "they sent to Yama's home even him who sought refuge in inaccessible places," *samlīnam api durgeṣu*, 1. 210. 20. So, when afraid of the Kāleyas. "some retreated to caves;" *kecid guhāḥ pravivisur nirjharāṁs cā 'pare śritāḥ*, 3. 102. 14. The *kandaras* (caves, a rare word in Mbh. but common in R.) are thus utilized by beasts and saints alike, *guhākandara (samlīnās)*, 3. 100. 17; ib. 40. 28. In 2. 31. 17 the caves of Orissa are mentioned (*prayayāu dakṣiṇāpatham, guhām āsādayām āsa Kīṣkindhām lokaviśrutām*) as being already famous. Cf. *durī*, 3. 64. 6; *kandara*, ib. 110; *taṭasānukandaram*, 3. 40. 28.

Later legends representing the mountains as very much alive occur in the accounts of the Vindhya, the Krāuñca, and the Māināka mountains. The fact that Krāuñca is the son of Māināka and Māināka is the son of Himavat, gives even a genealogical tree; but the descent is not always so given and Krāuñca itself or himself is also called the son of Himavat. Although the Vindhya legend is more popular, the story of Māināka is more directly connected with the tale of the winged mountains. The epic use of Māināka is to compare with this mountain a steadfast hero or elephant. For Māināka was the only mountain that escaped or resisted Indra, when the others had their wings cut off. "Like Māināka cast on the ground by great Indra" is the incredible fall of Bhīma (as hard to realize); it is parallel to the "drying of ocean or removal. *visarpaṇa*, of Meru, or the overthrow of Indra at the hands of

Vṛtra, or the fall of the sun, 7. 3. 4f.; 9. 12f. Stereotyped is the phrase "stood firm as Māināka," e. g. 6. 92. 26; 7. 92. 17; 99. 28; 123. 2; 9. 19. 45, etc., referring not to being unshaken by the wind, as is Vindhya-giri, 7. 92. 53, but to its firmness against Indra Nagāri ("foe of the mountains").

In 3. 134. 5f., Māināka is said to be as superior to all other mountains as Indra to other gods, or as Ganges to other rivers. It is situated north of Kāilāsa (q. v.) and is famous for the mass of gems and jewels deposited there by Maya in or near the lake Bindusaras, where Dānavas sacrifice, 2. 3. 3. It is spoken of as having a *vinaśana* (see below, Meru) in the interior of the mountain where Aditi "cooked food of old for the sake of a son," 3. 135. 3. The legend that Ocean gave the mountain refuse when it escaped from Indra is preserved in 1. 21. 15, "Māināka's asylum-giver is ocean." There is a watering-place there of some renown. 13. 25. 59. It is to (hundred-peaked) Mt. Māināka that a Rākṣasa with "one hundred heads" is compared, 7. 175. 63.

Mt. Krāuñca is called the White Mountain, because of the white silver there (Himavat is famous for gold-mines and gems), 3. 188. 112. Compare 13. 166. 30-31, "Himavat rich in herbs divine, Vindhya in metals, Tirthas, and herbs; and Śveta full of silver" (*rajatāvṛtaḥ*). It is guarded by seven-headed dragons and in it is the golden lake where the mothers of Kumāra (Skanda) bore him (by proxy). Skanda shot at Mt. Krāuñca and it fled but afterwards returned: "Skanda drew his bow and shot his arrows at the White Mountain, and with his arrows he split the mountain Krāuñca (cf. Krāuñca-nisūdaka, epithet of Skanda), the son of Himavat. . . Krāuñca fell uttering fearful howls and the other mountains seeing his fall began to shout. But Skanda split the White Mountain, lopping off one peak and the White Mountain fled in fear from earth," 3. 225. 10f.; 9. 46. 84. In 3. 229. 28, this mountain is called "Rudra's seed;" though it was son of Himavat (whom Menakā bore to Himavat). Compare 8. 90. 68; 9. 17. 51; and the seed of Rudra (Agni) cast on Meru by Ganges, 9. 44. 9; 13. 85. 68.

The legend of Vindhya (renowned for metals and plants, 13. 166. 31) represents that range of hills as angry with the sun for refusing to go round it as it does around Meru, in a respectful manner (*pradakṣiṇam*). Vindhya resolved to hide

the sun's light, and for that purpose began to grow till it shaded earth from the light of sun and moon. The gods begged it to stop growing, but to no purpose. Then the great saint Agastya got permission from it to pass over it both on his way south and on his way back. But as Agastya (the civilizer of the South) never came back, the mountain could grow no more and is still waiting for the saint's return before it grows higher, 3. 103. 16 and 104. 12 f. As the mountain rages here, so it may rejoice, "as a mountain rejoicing in heart receives the rain," 4. 64. 5, that is, shows its bravery, since "water is the destruction of mountains," *parvatānām julanī jarā* (as travel is the destruction of bodies; lack of fortune, of women; and word-arrows, of the mind), 5. 39. 78.

Another story illustrates a popular belief. The "Gāthās of the gods" say that there was a saint called Bāladhi, who desired to have an immortal son. The gods were kindly disposed toward him because he had been religious; but they said "No mortal is seen (to be) immortal; but he shall have a life conditioned by a cause," *nimittāyuh*. Then he, thinking "mountains are indestructible," said: "Let his life last as long as the mountains" (let the mountain be the cause). Then Medhāvin, his son, was born but, being arrogant, he insulted the saints. One of the saints, Dhanuṣākṣa, after vainly cursing him, took the form of a buffalo and charging against the mountains reduced them to ashes. So, the cause (of life) being destroyed, Medhāvin, the son of Bāladhi, was also destroyed. A Gāthā is sung about it to this day ("no one can escape what is ordained; Dhanuṣākṣa the great seer split the mountains").¹

In connection with the mountain-myths may be mentioned the story of the nymph turned into stone, like similar tales in Greek mythology. The Apsaras Rambhā, wife of Tumburu, was thus turned into a rock on failing to seduce Viśvāmitra as she came under the curse of that saint, 5, 117. 16, etc.

¹ This is the version in SI. 3. 135, which, at vs. 52, inserts half a dozen verses showing that the seer himself became a buffalo. The words in B. *mahiṣāir bhedayamāsa parvatīm* are changed to *maharṣir* and so in the Gāthā: *maharṣir bhedayamāsa Dhanuṣākṣo mahīdharān*. B., 135. 52 and 55, represents the saint splitting the mountains "by means of buffaloes." So, in the story of Kolāhala (p. 357, above). Vasu outraged by its behavior, kicked a hole in it, through which the river escaped.

Other legends abound, connecting some mountain with a god or saint. as in the landing of the ark on Nāubandhana, 3. 187. 50. Often the Puranic story is just alluded to, as when Govardhana is mentioned as the place where Viṣṇu-Kṛṣṇa (called *mahādrīdhṛt* in 13. 149. 32) upheld the hill for the sake of the cows, 5. 130. 46; 13. 159. 17 *gām uddadhāra* (SI. 7. 11. 4, *dāvān muktā . . dhrtvā Govardhanam*), VP. 5. 11. In the mountain Mahendra (Orissa chain) lived Rāma (after "ejecting the ocean") at the command of Kaśyapa Mārīca to "leave the earth,"¹ what time he extirpated the warriors, 7. 70. 21f. On the Narmadā river is the beryl-mountain (sometimes located in the north) and in this locality "Kauśika drank soma with the Aśvins and Cyavana paralyzed Indra and won Sukanyā as his wife," 3. 121. 19. Both epics have the story of Gandhamādana (also a name of Rāvaṇa, 3. 283. 5) as the home of medicinal plants, utilized by Hanumat to cure Rāma's brother. It bears the epithet *mahāuṣadhisamāyuktaḥ parvataḥ*, 7. 139. 86. In both epics, Mandara is the instrument used by the gods to churn ambrosia from the ocean, 1. 18. 13 = RB. 1. 46. 21 (C. 45. 18, less exactly like Mbh.).

This Mandara. "Indra's golden mountain," *jāmbūnadaparvata*, 3. 139. 16, is identical with Indra-Kīla. 3. 37. 42, and is especially invoked as the home of Sādhus and Munis. It is through the grace of this mountain that priests, warriors, and the farmer-merchant caste attain heaven. Tirthas (3. 26. 12f.), sweet streams, nymphs, and the sound of Vedic recitation are found there, 3. 42. 22f. In 1. 18. 11, it is supported by the sacred tortoise (Viṣṇu). Vṛtra, it is said in 3. 101. 15, "fell like Mandara hurled of old from the hand of Viṣṇu." Elsewhere it associated with Mt. Śveta: "We shall see the White Mountain and Mt. Mandara, where are the *mānīvara* Yakṣa and Kubera the king of Yakṣas, 88000 Gandharvas and four times as many Kimpuruṣas and Yakṣas" (who with Rakṣasas guard the mountain), 3. 139. 5. In 3. 163. 4, it lies east of (Meru and) Gandhamādana and "illuminates all the earth as far as the sea; and the region is protected by Indra and Kubera." Also here it is said that when Soma and the stars have gone around Meru they "return to Mt. Mandara," i. e.,

¹ So Yudhiṣṭhira on leaving Kubera's mountain "goes to earth" (and addresses it as a person, *draṣṭā tavā 'smi*, auf Wiedersehen!), 3. 176. 20.

to the east (SI. has 'sāgaram). It is located in the north, with Mandākinī, in 5. 111. 12, and in the South in 5. 109. 9, its grottoes (as in the Indraloka ascent, called *kuñjas*) being especially mentioned. In 5. 110. 9, it is found in the west. Here the root of Himavat is said to extend (in the western district) toward Mandara, inapproachable, sunk in the ocean. The fact that these three statements are virtually one description weakens the force of each statement and makes the eastern (Bengal) position of Mandara more probable, as this accords with tradition (at the present day "Mandargiri" is near Bhagalpar, Bengal). The fact that Mandara is especially Indra's mountain also helps to establish its geographical position, since "Indra's district" is the east.

But the epic has a vague notion of the northern mountains, the approach to which was difficult and the ascent impossible except to very great saints and heroes.¹ The Paṇḍus see, as they ascend from the south, the peaks of Kāilāsa, Mānāka, the foot of Gandhamādāna (*-pādas*), and Śveta; whence they journey seventeen days to the back of Himavat and "four days later" come to the White Mountain, "like a huge mass of clouds and full of gems and gold" (gold is in all the mountains, 2. 50. 21; 9. 44. 15, etc.) without having yet reached Gandhamādāna, 3. 158. 18f. But, when one stands on Gandhamādāna, the "mountain of Indra and Kubera" (that is, Mt. Mandara) lies to the east, as opposed to Sainyamana, the region of the south (of Yama), to the abode of Varuṇa and the Asta-mountain (where the sun sets; itself opposed to Udaya, sunrise-hill), and to the abode of Brahmā, "great Meru, which illuminates the north," while next (to the east) is the "abode of Visnu."² Compare the confused account of the Mahāpārśva mountains, and those "beyond Kāilāsa and Mandara," 13. 19. 20, 53.

¹ Cf. *āruruksur yathā mandah parvataṁ Gandhamādanam*, (boasting) "like a fool who (pretends he) is going to climb Mt. Gandhamādāna," 5. 160. 94.

² *Asta mahīdhra*, 5. 181. 16; *asto nāma parvata*, 5. 110. 6 (*astamana* = *astam-ayana*). The Udaya hill appears at 3. 224. 11. The Asta is conceived as a real "mountain-king," and there "and in the sea dwells Varuṇa protecting all creatures," 3. 163. 10. The gods find Śiva on Mt. Mandara, 7. 94. 57, though his regular abode is Kāilāsa, whose lofty peak serves the hyperbole of the poets as an image, "high as peaked Kāilāsa

Despite the fact that the gods roam about as they will and are constantly found in each others' pleasure-groves, they are ascribed in general not only to certain regions but also to certain mountains. Thus: "The Rakṣasas (*rakṣāṇsi*, sc. live) on Himavat; on Kāilāsa (Hemakūṭa) live the Guhyakas; serpents and Nāgas on (Mt.) Niṣadha; Gokarṇam is a grove of asceticism (cf. 13. 18. 6, Kṛṣṇa practiced asceticism there); the White Mountain is said to belong to all the gods and Asuras; the Gandharvas (live) ever on Niṣadha, likewise the Brahmarṣis on Nīla; but the resort of gods is the Peaked hill" (*śṛṅgavāṇs tu . . devānām pratisaṅcarah*; a special range), 6. 6. 51f. Then follows the statement that the fire of destruction (*saṁvartaka*) and the saints who precede Aruṇa (above, p. 357) are on top of Mālyavat, ib. 7. 28. Only *devī Śāṇḍilī* ("Agni's mother;" cf. 13. 123. 2f.) is, however, especially ascribed to Mt. Śṛṅgavat at 6. 8. 9, which, like Meru, has three peaks, one of gold, one of gems, and one of all kinds of jewels, 6. 6. 4 and 6. 8. 8. The flank of Meru called Karṇikāra (wood) is a favorite resort of Paśupati and Umā; and Hiraṇmaya is especially the mountain of Garuḍa, 6. 6. 24 and 6. 8. 6. The Gandharvas too live on Mandara (q. v.), on Meru (in Śāka-dvīpa), 6. 11. 15; and in Kuśa, ib. 12. 14, while "all the districts" (*sub Krāuṇa-dvīpa*) have gods and Gandharvas, ib. 12. 21. Harigiri, "Viṣṇu's hill," is in Kuśa-dvīpa 6. 12. 11. Skanda gives his special mountain, near Ellora. the name of *devagiri*, "hill of the god" (not "gods' hill"). The *devakūṭa* (tirtha) of 3. 84. 141 (ib. 149, the "lake of Pitāmaha" near the Śāilarāja) may refer to the "hill of gods" (in general). The statement in 12. 27. 21, that Drūpaḍī grieves for her five sons "like earth deprived of five mountains" does not limit the number of mountains in any way.

Further examination of the data leads into the realm of cosmology and ethnology, with which mythology on its religious side is less nearly connected. Yet a word must be said in regard to the conception of the Himālayas in general and the site of the world-mountain Meru. It is evident that the epic

stood he, with club upraised," 6. 94. 23, etc. "High as Mandara," 1. 207. 32 (*gopuras*). Gandhamādana (Kubera's own mountain) is where Pitāmaha receives in audience the gods and seers, 6. 65. 42. The *pādas* (above) of this mountain suggest the simile of 1. 136. 2, *pādacārīva parvataḥ* (Karṇa in arena) "like a footed mountain." The *pāda*, foot (plain), of Himavat is "snowy" (*hāima*), 7. 55. 39.

poets are acquainted with the world as it appears from the Gangetic plains, where the Eastern Ocean is known but not near; where the "western littoral" is also known but distant, as are the "Puñjāb kings," the mountaineers, and, more remotely, the kings of the Śakas, Pahlavas, Daradas, Kambojas, Yavanas, etc., e. g. 5. 4. 15f. But the flight of Indra to "the end of the worlds" sets him in a lake on an island in the sea north of Himavat. 5. 10. 45; 14. 8; and when Arjuna goes north he finds beyond the White Mountain the land of Kimpuruṣas, protected by Drumaputra, and still farther the land (protected by Guhyakas) called Hāṭaka, near lake Mānasa, where there were "streams of saints," *ṛṣikulyās*, and near Hāṭaka (which gives its name to a kind of gold) he comes on the country protected by the Gandharvas (the Gandharva-nagara is localized here), whence he seeks to cross the "northern Hari-Varṣa" or unconquerable land of the Northern Kurus, 2. 27. 29 to 28. 11 (and expanded in SL), just as Bhima gets to the extreme south when he comes to Tāmralipta, 2. 30. 24. Jambudvīpa, 3. 79. 4 and 6. 1. 8 (*yāvat tapati sūryo hi Jambūdvīpasya maṇḍalam*) and 14. 85. 39, is India.

Himavat itself is often personified, though too huge to be always thought of as individual. For the most part it serves as does any hill (1. 188. 7), for a type of stability, endurance, and size. A standing solemn asseveration is, "Himavat shall fall (or burst) and earth shall burst" (ere such or such happen), where the common distinction between earth and mountain again appears.¹

A general description in 3. 108. 4f., lauds Himavat's peaks, rivers, forests, caves, lions, tigers, birds (the kinds being given

¹ *caled dhi H. śūlah*, etc., 5. 82. 48; cf. *pated Dyāur H. śīryet*, 3. 12. 130, and oft. In 3. 32. 10, it is said that even Himavat, if "divided up and not added to," *bhakṣyamāṇo hy anāvāpah*, might be destroyed. Its hugeness leads to the phrase "hide Himavat with a handful of grass." 3. 35. 23 (like "hiding Meru," ib. 29); "it cannot be moved," 13. 35. 20; typical of *dhairyā*, 1. 183. 9. The most striking personification of Himavat occurs at 13. 25. 62, *vikhyāto Himavān puṇyaḥ Śaṅkara-śvaśuro giriḥ. ākaraḥ sarvaratnānām siddhacāraṇasevitaḥ*, "Mt. Himavat, a mine of gems of all sorts, is called Śiva's father-in-law; it is holy and cultivated by saints and singers" (Śiva's wife is Pārvatī, "daughter of the mountain"). Hence perhaps Śiva is called Hāima, but, as he "lives in mountain caves," it may be that *hāima* means "living on Himavat," as he is Merudhāman, "living on Meru." 13. 17. 61, 64 (*hāima*), and 91. Himavat is also "father of Ganges," 6. 119. 97 and of Mt. Abu (below).

in detail), Kinnaras, Apsarasas, elephants, Vidyādhara, jewels, and snakes. In particular it is famous for its gold-mines and gold-bearing waters.¹

Kāilāsa is of all the mountains in Himavat the most famous and serves as a means of comparison when one wishes to describe towers etc., which in Sanskrit as in our parlance are called "sky-scrappers," *divisprś*, as in 1. 185. 19; 2. 34. 20; cf. (not in B) SI. 1. 96. 56, *Kāilāsaśikhārāir gopurāiḥ*. Even the house of lac is compared with it, 1. 146. 12, or a man, as Balarāma is "like the Kāilāsa peak," 1. 220. 20. It lies, as described in Vana, beside the upper Ganges but beyond the Northern Kurus and is near Mt. Māināka. 3. 145. 17 f., 41 and 51 (also SI. 1. 243. 31). The Sabhā of Kubera is "like the peak of Kāilāsa" 2. 10. 2. It is said to be six leagues (!) high. All the gods assemble upon it, and the Yak-as, Rak-asas, etc. to be seen there are without number, 3. 139. 11 f. The monster jujube described as being there and in Gandhamādana (*ib.* and above) shows perhaps that no great distinction was felt between them, unless one was a part of the other. According to 3. 12. 43, Kṛṣṇa once lived there (SI. quite different, *vāirājabhavane* for *Kāilāsubhāvane*).² The two mountains elsewhere, as at a later date, are differentiated.

¹ Compare 5. 111. 24, the "gold-mine of Himavat," *hāimavataḥ kanakākaraḥ*, and "gold-giving lake," found at Uśira bīja. In 3. 82. 55, Arbuda is "son of the Himālayas," *himavatsuta*, "where there was of old a cleft in the earth" and asylum of Vasīṣṭha. As it is near Prabhāsa (on the Gujarat coast) it must be the modern Mt. Abu, and not Māināka, as later in VP. The gold comes from "Rudra's seed," 9. 44. 15. Gold in the "essence;" *sāra*, of (all) mountains (as honey is of flowers), 13. 17. 14.

² The commentators here understand *badarī* and *vāisālā* to refer to the jujube tree and not to the stream or asylum of Nārāyaṇa so called (5. 111. 4). But anyway Kāilāsa seems to include, as a range, the further hill called Māināka and Gandhamādana. Cf. the later *rajatādri* "silver hill," as epithet of Kāilāsa, with the statement above regarding Śveta. In 3. 158. 17, where the heroes see Gandhamādana and Śveta after Kāilāsa and Māināka, SI. has Meru for Śveta. In the more or less stereotyped geographical scheme of 6. 6. 1 f., Gandhamādana lies north of Mālyavat, which is north of Nīśadha, and Nīśadha is the mountain west of Hemakūṭa (Kāilāsa). According to a v. l. in SI. "black men" live on Gandhamādana (in B, they are "happy" *hr̥ṣṭā*, *kṛṣṇā narāḥ*), 6. 6. 31 (36). In 1. 119. 48, Gandhamādana is this side of Indra-Kīla and beyond Himavat (cf. 3. 37. 41); it is protected by Saints, Siddhas, and by *mahābhūtas*. Indradymna-lake and Haṇsa-kūṭa lie beyond it (*ib.* 50). It is accessible only to ascetic mortals, and the *viśālā badarī* is there, 3. 140. 22; 141. 23.

Mt. Meru, if no cosmological theory stood opposed, would seem to be a hill "beaten by rain," 7. 166. 14; 174. 20, etc., like other hills of the north country, only surpassing all and reaching higher than the sun, so that the sun goes around it, 3. 104. 2. It is Meru-giri, *trikūṭa*, the best of peaked mountains, 5. 65. 5 (it has three golden peaks, 6. 82. 27), and it is covered with cloud but not stirred, *mathita*, by the wind, 7. 156. 81f. ("Wind shall bear away Meru, and the sky fall," ere this thing shall happen, is said as above of Himavat, 5. 160. 98). The "rocks of Meru" ("may be counted," 13. 26. 98) appear to be as well known as the "sands of the Ganges" (with the stars in the sky usually as type of countless hosts of cows), 7. 58. 7, *yāvatyaḥ sikatā gāṅgyo yāvan Meror mahopālāḥ*. Like other mountains it is red with metal, 5. 179. 30 (see above). Like other peaks it stretches to the heavens and "golden Meru" is a part of the Svarloka (light-world), holding parks of the gods, its extent being given in one place as three and thirty thousand leagues, 3. 261. 8. It is the "Indra of mountains" and is ever resplendent with sunlight, 1. 225. 37; 2. 38. 28; 3. 81. 5. Yet its glory excels that of the sun, and it is the home of gods, Gandharvas, and beasts, but not of men who are unrighteous. It is there the gods consulted how to use Mandara as a churning stick to get ambrosia, 1. 17. 5f.; and 1. 18. The *deva-sabhā* is on Meru, SI. 2. 51. 43. It cannot be destroyed (or, SI., turned round, *vivartanam* for *vimardanam*), 3. 36. 3 (cf. *viparyāsa*, 7. 193. 7) or concealed (above). It is typical of dignity (*Merupratīmagāurava*, "O thou as grave as Meru!"), 3. 41. 40.

Yet the poets do not hesitate to say that the sun lights it, SI. 4. 19. 13; that vultures visit it, 3. 225. 33; that the saint Viśvāmitra can "hurl Meru away from earth," 1. 71. 36; and that the "house-goddess" can devour it, 2. 18. 8. Hiraṇyakaśipu is known as "the shaker of Meru" (*-kampana*), 13. 14. 73. On its wooded top sit saints and gods, 12. 324. 11—21. Asylums are found there, as, for example, that of Vasiṣṭha, albeit "on the flank" of the mountain, 1. 99. 6, though Yayāti sports upon its very peak, *Meruśrṅge . . uttare* (northern), 1. 85. 9, as does Uśanas with the demon Dāityas, 6. 6. 22, and the

It is described in 3. 146. 22. as "dancing with clouds outspread" (as a ballet-dancer with skirts).

"wives of the gods" ascend it, 1. 134. 16. The mountain is spoken of as if the poets saw it before them. "He shone in splendor on his golden car as shines the sun on Meru," 7. 84. 17; "looked like Mahā-Meru with its clouds," 6. 109. 38; "resplendent as the peak of Meru," 7. 120. 4. A long description of it is found in 3. 163. 12f. It lies north of Gandhamādana, is holy, the gate of the saints, and illuminates the northern district. There Prajāpati, the soul of being, abides. There too, in a blessed and healthful abode, live those who are called the *putrā mānasāḥ* of Brahma (his mental sons), of whom Dakṣa is the seventh (14). The "seven seers of the gods" (Devarṣis) set and rise there. The topmost peak is occupied by Pitāmaha, "with the self-pleased gods" (*ātmatrptāḥ*); but beyond the seat of Brahmā is that of the eternal supreme Nārāyaṇa (God). This even the gods cannot see (or "see with difficulty," SI.), 18. This place of Viṣṇu (God) is to the east of Meru and is inaccessible even to Brahmarṣis and so, of course, to the "great seers" (Maharṣis, by implication inferior to Brahmarṣis, ib. 21), though Manu holds a conversation there, 13. 98. 6. Around Meru revolve continually the sun and moon, from east to west. *pradakṣiṇam upāvṛtya kurutaḥ* (cf. 3. 168. 36, *giriṁ āmantrya Śāśiram pradakṣiṇam upāvṛtya*), as do all the heavenly lights, which the sun drags with him as he makes the circuit. *kurute* (Merum) *abhipradakṣiṇam*; for the sun, on reaching the Asta mountain and getting "beyond the twilight," takes the northern district as his course, *bhujate* . . *kāṣṭhām* (to the north of Meru) and so returns, facing east, 30f.: *Merum anuvṛttaḥ sa punar gacchati prāṇmukhaḥ* (SI. has *sumerum* for *sa Merum*). Thus also the moon, dividing the months, goes with the stars (*nakṣatras*), and "passing on the other side of Meru . . returns to Mandara" (i. e., the east).¹ Meru itself is east of Ketumāla, 6. 6. 31.

¹ The expression *atikramya* is a technical geographical term, meaning "passing behind" or "on the other side of;" cf. Pāṇ. 3. 4. 20. In 30, above, it is used of the sun getting to the other side of the twilight. In 13. 96. 10, one who kills a refugee is likened to one who should *atīkrāmet* (sic) the brightness of Meru, i. e., disdain. The account following (above) says that to make winter the sun goes to the southern district, but nothing more is said of Meru at this point. In 3. 164. 8, the mountain of the north is luminous with *plants*, and has no distinction of day and night; but the inhabitants see the sun rise and set (*astamana*, 9).

It is even possible that Māināka is at times regarded as part of Meru. There is a *vināśana* ascribed to Māināka above, and in the Tirtha stories of Vana, 3. 82. 111, the *vināśana* of the Sarasvatī, is where this river "goes concealed on Meru's flank" (and is seen again at Camasa, Śirodbheda, and Nāgodbheda).

The Meru of the Mahābhārata nowhere appears to be regarded as the axis of the world, the north pole to which the (later) Sumeru is antithetical. In the "car of the gods," it is the perpendicular flagstaff of the car, that is it is a lofty mountain-range situated in the north, 7. 202. 78. In view of the theory recently propounded in this Journal that Babylonian and Hindu cosmology rest on the same basis, it is necessary to observe that there is in fact no southern pole. Sumeru, recognized at all in the epic. One passage given above shows a doubtful reading (SI.) of *sumeru* for *sa Meru*, but in that case *sumeru* is Meru itself ("fair Meru"), as shown by the context. The only other case where Sumeru occurs is of a similar nature. Instead of the reading *babhūva paramopetaḥ svayambhūr iva bhūnunā*, in 6. 2078 (C.), the Bombay and South Indian recensions have (50. 46) *sumeru iva*, which, in the light of the similes just given, is evidently "resplendent as fair Meru."

Meru as described in the late geographical intrusion at the beginning of Bhīṣma¹ is half way between the earlier and

¹ It is only here that the Persians bear the (Puranic) name Pārasikas. 6. 9. 66, *Hūṇāḥ Pārasikāḥ saha* (so too in SI.; in VP. 2. 3. 13. *Pārasikādayas tathā*, to avoid three iambs). One very important difference between the epic and Puranic descriptions is that, whereas the Viṣṇu Purāṇa 2. 4. 1, says that the Plakṣadvīpa (and others) surrounds the sea, which in turn surrounds Jambūdvīpa, *kṣārodena yathā dvīpo jambuāṇjño bhiveṣṭitaḥ. samveṣṭya kṣāram uladhīm plakṣadvīpas tathā sthitaḥ*, the epic nowhere says that a continent encircles an ocean, but only that an ocean surrounds each continent, 6. 5. 13 f.; cf. ib. (S. 10 and 15) 11. 6: 11. 9; 12. 1 f. Furthermore, in 6. 12. 27, after remarking that "jewels come into (are exported into) the Dvīpa called Puṣkara from Jambūdvīpa" (just as "Indra brings the rain from Śāka-dvīpa," 6. 11. 16), the poet says that all these *dvīpas* excel as they go north, both in virtue and in length of life, but that nevertheless they must all be regarded as one nation, "for that is called (one) nation where there is one law" (or religion), *eko janapado rājan dvīpeṣv ete. u Bhārata, uktī janapadā yeṣu dharmāś cāṭkaḥ pradṛśyate*, and finally he ascribes to the guardian elephants of space a "Plain" country still beyond those already mentioned,

later (Puranic) conception, and one among many indications that the muddled South Indian text (as published) is tainted with later passages is to be seen in this, that just where Meru is sufficiently described in the Bombay texts as being eighty-four thousand leagues high and eighty-four thousand deep, the SI. text adds (in the words of the Viṣṇu Purāṇa, 2. 2. 8) that its apex is twice the size of its base, 6. 6. 10. To get a proper idea of the epic Meru it must be remembered that in this work the *dvīpas* islands or continents, are not spheres but parts of the earth, which to the observer stretch away to the north and north-west on a scale resembling in general that made with Mercator's projection (the farther north the greater the extent), each continent having all its virtues including size, double that of the preceding. Meru is one of seven mountains running across Jambū the Rose-apple continent. It stands exactly in the middle, having south and east of it the three great ranges Nisadha, Hemakūṭa (or Kailāsa), and Himavat (the thousand leagues between each range making a valley, *varṣa*), and to the north and west of it the ranges called Nīla, Śveta (White Mountain) and Śṛṅgavat, while north of the last the country "borders on the sea," and so stops the row; but south of the south-eastern end, occupied by Himavat, lies the India of the plains, Bhārata-land. Other continents to the north and east of Jambū-dvīpa (Rose-apple continent) are Ketu-māla, immediately west, and Kaśyapa-continent still further west, which, along with Śāka-continent, or Nāga-(Ceylon? In SI. Śāka for Nāga. 6. 6. 56)¹, forms the ears of the "hare"-shape of part of Sudarśana, equivalent to Jambū continent (also of the discus). This in general is circular, but part of it looks like a hare and part looks like a tree and these shapes are reflected in the moon "as in a mirror." It

tataḥ paraṁ samā nāma, having four corners, and thirty (leagues?) in extent, 6. 12. 33 (or "having thirty circuits"). This land called Samā is itself (*ib.*) described as *lokasaṁsthitiḥ*, "the form of the world," as if it were the tower of Babel in Sumerian land! Kuśa is not an uncommon place prefix. Compare Kuśāvarta a teacher on Mt. Nīla, mentioned with Gangādvāra, in 13. 25, 13; Kuśastamba, *ib.* 26 (Kuśasthalī is Dvārakā). Kuśadvīpa was presented to Vidyutprabha by Śiva, according to 13. 14. 84.

¹ Lankā also has its *trikūṭa*, three-peaked mountain (cf. *triśrūga*, 8. 15. 8). The Vedic *trikakud* is an epithet of Kṛṣṇa-Viṣṇu. Bhāratavarṣa is middle India, 6. 9. 4f.; 12. 326. 14f.

is possible that the land called Kaśyapa may be Caspian land, at any rate that is where it should be according to the description. Meru rises in the middle of Ilāvṛta, between Nīla and Niṣadha and also between Mālyavat and Gandhamādana. On its flanks are Ketumāla on the west; Bhadrāśva, the land of the Kālāmra-tree (above), on the east; the Northern Kurus and the Karnikāra forest, on the north. Ganges falls from its peak into lake Candramas, appearing first at Bindusaras near Māinaka, north of Kāilāsa. On its south is Bhārata-land. The countries and mountains from the last north to Bhārata in the south lie like a bow (curved). The Śāka-continent also has seven mountain-ranges and the first is Meru (6. 11. 15). Meru is the house of divinities and is golden (even the birds being indistinguishably golden); so it resembles the sun (not in being round but in being brilliant), 6. 6. 10. The juice of the 1100 league high rose-apple tree (*divasprś*, "touching the sky") runs around the base of Meru and gives health, agelessness, etc., to the Northern Kurus, as said above, 6. 7. 20.

But it would be a mistake to suppose that there are literally seven continents. Even in this description the poet says expressly: "There are many continents; I will describe seven," 6. 11. 4, using indeed a synonym, since *sapta dvīpāḥ* meant originally the *subahavo dvīpā yāir santatam idam jagat* ("very many continents extend the world").¹ They are thought of as comprising not the sphere of the universe but the earth, *saptadvīpā*, so called in 8. 90. 106; 12. 49. 37; cf. "earth with its seven continents and seas," R. 7. 38. 56. The poet of the Jambūkhaṇḍavinirmāṇa is quite right in saying there are more continents. In Sabhā is mentioned a Śākala-dvīpa and the "seven *dvīpas*" are here clearly equivalent to "the whole earth." Thus in 2. 12. 12, Harisćandra, a king, "conquered the seven continents," *id est*, the whole earth, and in 2. 26. 5f., "He conquered Śākala-dvīpa and king Prativindhya and whatever kings there were in all the seven continents," meaning of course in this conquerable earth. In 2. 32. 14, Śākala is a city of the Madras (Puñjāb). Compare 13. 95. 23, *sapta dvīpān imān varṣeṇā bhīpravarṣati*, "rains over this earth." But "earth has thirteen *dvīpas* in 3. 3. 52 and 134. 20; and eighteen

¹ Compare the use of "seven kings" of the Kirātas, the "seven tribes" of Utsava, 2. 27. 16; 30. 12, etc. "Seven" is often several.

in 7. 70. 15.¹ The "gate of Mānasa lake," according to the epic itself, 3. 130. 12, is called "the *varṣam* made by Rāma in the midst of the mountain," apparently Mt. Kāilāsa, where the famous lake (the brooding-place of swans) is situated, although the passage would appear also to include it within the "holy circuit of Kashmir," *Kāśmīramanḍalam* (*sarvapūṇyam*) not far from which is Viṣṇupadam. The "seers of the north," *āuttarā ṛṣayaḥ*, held a conversation there with Nāhusa, Agni, and Kāśyapa, ib. 8 and 10.

The number of oceans is indifferently given as four or seven. The "four oceans united by Darbhīn" are repeatedly alluded to: 3. 83. 156; 84. 126; 85. 63. On the other hand, the *saptasamudrāntā mahī* of 7. 198. 55 (R. 4. 15. 8) and *sapta samudrāḥ* of R. 3. 78. 4 imply earthly oceans numbered conventionally as "seven" (still earlier, as in VS. 13. 31, there are three oceans; or only the eastern and western, as in Manu, 2. 22). But even "four oceans" are also recognized, as in Manu 8. 406 and Kath. 69, 181, *catuḥsamudrā pṛthivī*.

Thus the very account in the epic which is supposed to imply the Puranic cosmogony speaks of only four oceans in 6. 3. 38, *catvāraḥ sāgarāḥ*. In the account of the Dvīpas also four oceans are expressly mentioned, *ghṛtatoṇḍī samudro 'tra dadhimandodako 'paraḥ surodaḥ sāgaras cāiva tathā 'nyo jalasāgaras*, 6. 12. 2, though in 11. 8f. the *kṣīroda* is said to surround Śāka-dvīpa. Apparently the original conception was that there was around all the earth four seas, one for each direction, just as there was a four-fold river running from the mountain in the middle of all the earth, and, to judge by the disposition of the four regions around Meru, there were at first but four *dvīpas*. Thus in 6. 6. 12: "On the flanks of Meru are four (is)lands (*tasya pārśveṣv amī dvīpās catvāraḥ sanisthitā vibho*), Bhadrāsvala, Ketumāla, Jambūdvīpa. and the Northern Kurus." In VP. 2. 2. 22, the first two are called *varṣe dve*. Even there *dvīpa* is used for *varṣa*. Compare VP. 2. 2. 3, where the *varṣa* called Bhārata has nine *dvīpas* (Indra-dvīpa, Nāga-dvīpa, Gāndharva, Vāruṇa, etc.).

As late as the Śānti, 12. 14. 21f., the four Dvīpas around

¹ Jambūdvīpa is mentioned as "famous" in 3. 79. 4. SI. 2. 96. 29 adds one passage to those giving "seven dvīpas." The *dvīpa* is a safety-place of any sort, 2. 63. 7f.; 3. 177. 19; 8. 93. 5; 12. 302. 71f.

Mahā-Meru are spoken of as we should speak of the quarters of the earth. The king is said to have brought under his sway "Jambūdvīpa, and Krāuñca-dvīpa which resembles it lying below, *adhareṇa*, Mahā-Meru, and Śāka-dvīpa, to the east of Mahā-Meru, and Bhadrāśva of equal extent with Śāka-dvīpa lying north of Mahā-Meru;" and further: "Dvīpas and *antara-Dvīpas* by plunging into the sea thou hast brought under thy dominion," vs. 25. Here the Dvīpas and "antara-Dvīpas" are all part of the conquest of a king of earth, as earth itself in 12. 14. 38 is described as *saparovatanadvīpā*, "(divine earth) with her mountains, woods, and islands."

In this book alone. 12. 336f., occurs the description of the White Island, Śveta Dvīpa, otherwise known only from the Purāṇas (including the Harivaṃsa), which is a part of the earth lying in the northwestern direction where men profess a monotheistic cult. There is no reason to suppose that Śveta Dvīpa was ever heard of for centuries after our era. It forms no part of the very complete geographical sections in the early epic or even of the late intrusion which precedes the Bhagavad Gītā at the beginning of Bhīṣma.

Despite pretended familiarity with the northern country, it was really reckoned a death-journey to go thither. Thus when Sañjaya "says farewell and sets out for the Himālayas," it means he is going to the bourne whence there is no return, 15. 37. 34. Questionable also is the exact bearing of "Himavat" to the southerner. As Mt. Abu is a son of Himavat (above) so the "plain of Himavat" (*prastha*) extends so far south that it is within two leagues of Kurukṣetra. There, "on the plain of Himavat, besides the red Sarasvatī" is the camp of the Paṇḍus, 9. 5. 50f.; 6. 4.

Particularly in regard to Meru it is to be noticed that even in Śānti its peak joins that of Himavat and is of the same height, so that the two united peaks form simple edges (at least Śuka has to burst his way through them as they join together), which would be indistinguishable were it not that one peak is golden (Meru is *hemagiri*, 8. 56. 114) and the other (snowy or) silvery, 12. 334. 8f. Nor does it accord with the notion of a polar mountain that its top has groves upon it and that not only gods and saints sit there but even "gentle and learned priests" live under the Jambū-tree on its very summit, 13. 102. 20f. In SI. 13. 33. 22, Vatsanābha

proposes to expiate his fault by "going to the top of Meru" and committing suicide. In the epic, in short, Meru is felt to be a mountain like Himavat, only taller and farther north; but its peak rises like that of other mountains perpendicularly and not parallel with the plain of earth as axis of a sphere.

Another distinction between the epic and Puranic idea of the world must be kept in mind. In the Purāṇas, e. g. VP. 2. 7. 1f., there is fully developed the idea of the planetary spheres (not Dvīpas) which go by the names Maharloka, Janaloka, Tapoloka, and Satyaloka, superadded upon the older Bhūrloka and Svarloka or Svargaloka (these are epic) with the intermediate *bhuvās* as Bhuvarloka. Now the epic knows nothing of these seven spheres as such. It is only in its latest parts that it recognizes the seven spheres *bhuvanāḥ* (masculine!), 13. 16. 34 and 52: *Dhruvaḥ saptaṛṣayaś cāi 'va bhuvanāḥ sapta eva ca*, "Dhruva, the seven seers, and seven spheres," not exactly as in the Purāṇa, even then, since there (loc. cit.) the pole-star, Dhruva, is above the Seven Seers. and only four spheres rise above this. What the earlier epic recognizes is the (old) general conception expressed by "seven worlds;" compare (in the imitation-Upaniṣad) the half-verse *tataḥ paraṁ kṣetravido vadanti prākālpayad yo bhuvanāni sapta*, 3. 213. 22. So in 1. 179. 22, the *sapta lokās* are mentioned as in Muṇḍ. Up. 2. 1. 8; cf. AB. 2. 16; 4. 7; 4. 9; 5. 10. That is to say, the epic has the idea of the plurality of worlds, vaguely grouped as Seven Worlds, as this idea came down from antiquity together with that of the Seven Hills, Seven Seas, Seven Rivers, Seven Mountains, Seven Seers, Seven Flames, etc. But there is no recognition of the systematic sevenfold planetary sphere, whose names as subdivisions are not even mentioned till the Purāṇas (cf. 3. 261. 17f. many worlds). In this regard the ideas of space run parallel with those of time. The Puranic system of Manus and *manvantaras* (aeons and ages systematically arranged) is unknown to the early epic. The Anuśāsana, which is little better than a Purāṇa-addition to the poem, knows it well; and so do the later (335—350) Parvans of Śānti and possibly the Sun-Hymn (which alludes to Mithra of Persia) in Vana. The "worlds" of the epic are three or seven or twenty-seven or innumerable. Against the assumption of Indo-Babylonian cosmological unity stands the fact that the earlier the Indic data are the

slighter appears the resemblance to those of Babylon. Even if it be claimed that the epic represents only a disintegrated original system, it must remain an historical contradiction that its data show earlier conceptions than those of the Purāṇas and yet represent the system of the Purāṇas. The only parallel with Babylonian cosmology in India's very early literature is, as it seems to me, the "seven worlds;" but as these are not spheres and as seven is anything but a precise term, it would be periculouſ to make very much of that fact. Buddhistic world-theories are too late to be of importance in this regard, but they too have affected the later epic.

Expression of the ideas "to be" and "to have" in the Philippine Languages.—By FRANK R. BLAKE, Ph. D.,
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ONE of the most important uses of the study of languages which lie outside of the more familiar Indo-European and Semitic groups, is to broaden our knowledge of general grammar, to make us acquainted with unfamiliar turns of speech, and to disabuse our minds of the notion that the way in which the better known tongues are accustomed to express a certain idea, is the logical and only way. In several articles previously published in the *Journal* I have illustrated this general principle by bringing forward some of the most peculiar linguistic phenomena of Tagalog and the other Philippine Languages, I have discussed their peculiar system of counting, in which the numbers intermediate between the tens are made, somewhat as in Latin *duodeviginti*, *undeviginti*, upon the basis of the ten toward which the count is proceeding; I have pointed out that simple adjectives have the same construction as relative clauses; I have shown that the case relation of a noun or pronoun may be expressed by the form of the verb.¹ In the following paper I shall discuss the peculiarities involved in the expression of two ideas of fundamental importance, without a knowledge of which it is impossible to have the mastery of any language, the ideas "to be" and "to have."

In the languages with which we are most familiar, English, German, the Romance Languages, Latin, Greek, these ideas are expressed by verbs, and so to our minds this is the most natural and simple way of expressing them. We receive our first shock when we turn to Sanskrit, where we find there is

¹ Cf. my articles, *Contributions to Comparative Philippine Grammar* II., JAOS, vol. xxviii, 1907; *The Tagalog Ligature and Analogies in other Languages*, JAOS, vol. xxix, 1908; *Expression of Case by the Verb in Tagalog*, JAOS, vol. xxvii, 1906.

no verb for "to have" at all, but that we must express the idea by the verb "to be" followed by the genitive, e. g. *mama asti* "it is of me, I have," a construction, however, for which we have been prepared by the Latin *mihi est* = *habeo*.

If we turn from the Indo-European to the Semitic field, conditions are still more unfavourable to our preconceived notions. Not only is there no verb "to have" in any of the languages except Assyrian,¹ but the idea "to be" is often not expressed by the verb "to be," but by particles, or pronouns; in fact it is sometimes not expressed at all. For example in Hebrew "I have a horse" is rendered by "to me a horse" לִי סוּס, "the man is good" by "the man good" הָאִישׁ טוֹב or "the man he good" הָאִישׁ הוּא טוֹב.

In the Philippine Languages we must break entirely with our traditions, for here we find generally speaking no verb for either "to be" or "to have," these ideas being expressed either by particles, or simply by the construction itself.

These two ideas are, however, not always expressed in the same way, there is not one particle which can always be used to translate 'to be' and another which can always be used to translate 'to have;' the mode of rendition depends on a number of things besides the fundamental ideas of 'being' or 'having.'

In the case of 'to be' we must distinguish three types of construction, viz.:

a) constructions in which some statement is made with regard to the class or characteristics of the subject, e. g., 'the man is good,' 'his father is a farmer;'

b) constructions in which some statement is made with regard to the place of the subject, e. g., 'his father is in the house;'

c) constructions in which some statement is made with regard to the existence of an indefinite subject, corresponding to English 'there is,' 'there are,' German *es gibt*, French *il y a*.

The first we will call 'copulative to be,' the second 'locative to be,' and the third 'indefinite to be.'

In the case of 'to have' we must distinguish two types of construction, viz.:

¹ Here the particle which corresponds to Hebrew *ו*, Syriac *ܐܠ* has become a verb and takes verbal inflection, cf. Delitzsch, *Assyrisches Handwörterbuch*, Leipzig, 1896, p. 310a.

a) constructions in which the thing possessed is definite,
e. g., 'your brother has the money I sent you;'

b) constructions in which the thing possessed is indefinite,
e. g., 'have you any money?'

We will call these two types respectively 'definite' and 'indefinite to have.'

'Definite to have' is expressed in the same way as 'locative to be,' the original idea here being similar to that in Latin *mihi est*, 'is to me.' Sanskrit *mama asti*, 'is of me.' Modern Arabic *عندي* 'andî 'is with me,' Ethiopic **በ፡፡** *bēja* 'is in me.' 'Indefinite to have' and 'indefinite to be' are expressed in the same way, the idea of 'having' being the original one and passing into that of 'indefinite being' when the possessor is indefinite; e. g., 'they (indef.) have visitors in the house' becomes 'there are visitors in the house,' just as in Spanish *hay*, and French *il y a*.

The five types therefore resolve themselves into three, viz.: a) copulative to be, b) locative to be and definite to have. c) indefinite to be and indefinite to have.

The negative of these three types is expressed in two different ways; either the negative is added to the affirmative construction as e. g. in English 'he is' and 'he is not,' or a negative particle meaning 'not to be,' 'not to have' is substituted for the affirmative particle meaning 'to be,' 'to have,' as e. g., in Hebrew **אין** 'I have' and **אין לי** 'I have not.' The first way is the regular one in the first type, the second in the other two.

The following table gives the particles which are employed to express 'to be' and 'to have' affirmatively and negatively in the three types of construction just discussed. A dash indicates that no particle is employed. Generally speaking these particles are invariable for person, number, mood and tense, though occasionally they are varied to express person or follow the tense formation of the verb. The particles will be known as quasi-verbal particles or quasi-verbs.¹

The languages treated are Tagalog; the Bisaya² dialects

¹ It would be well to adopt some such designation in Semitic grammar for particles like Heb. **יש**, **אין**, **עוד**; Arab. **ليس**, Syr. **ܐܝܢ**, Eth. **በ፡፡**, etc., instead of speaking of them as adverbs, nouns, or prepositions.

² I have adopted in this article the spelling of the language names suggested by Prof. C. E. Conant in *Anthropos*. Vol. IV, 1909, pp. 1069

Cebuan, Hiligayna, Samaro-Leytean; Bikol; Pampanga; Pangasinan; Iloko; Ibanag; Bontok and Nabaloi Igorot; Magindanau; and Sulu.¹

		I copulative 'to be'	II locative 'to be' definite 'to have'	III indefinite 'to be' indefinite 'to have'
Tag.	<i>aff.</i> <i>neg.</i>	— dî, hindî, dili	na walâ	may walâ
Bis. (Ceb.)	<i>aff.</i> <i>neg.</i>	— dili	{ nia, ania, naa, { anaa, tua, atua wala	{ may, duna, aduna, { duna may wala
Bis. (Hil.)	<i>aff.</i> <i>neg.</i>	— dili	{ ari, yari, ara, { yara, adto { wala, wa { walay, way	{ may { wala, wa { walay, way { wala may, wa may
Bis. (Sam.-Ley.)	<i>aff.</i> <i>neg.</i>	— diri	ini, ada, adto, ito, waray	may waray
Bik.	<i>aff.</i> <i>neg.</i>	— di, bako	{ yaon, iyaon, { idtong, na day	may, igua day
Pamp.	<i>aff.</i> <i>neg.</i>	— ali, ai, e	ni, ani, ti, ati, ta ala	tin, atin ala
Pang.	<i>aff.</i> <i>neg.</i>	— ag, alioa	oa andi	oala andi
Ilok.	<i>aff.</i> <i>neg.</i>	— di, saan	adda aoan	adda aoan
Iban.	<i>aff.</i> <i>neg.</i>	— ari, akkan, ji	egga auan, an	egga auan. an
Igor. (Bon.)	<i>aff.</i> <i>neg.</i>	— adi, faken	woda, woday ma'id	woda, woday ma'id

to 1074. The general principle of spelling which he there proposes, and which should certainly be followed by all those who are working in Philippine Languages, is to use the native name of the language wherever possible. The changes from the spelling formerly used in my Philippine publications are, viz., Bisaya for Bisayan, Pampanga for Pampangan, Iloko for Ilokan, Magindanao for Magindanao.

¹ For the principal grammars and dictionaries of these languages cf. the list given in my *Contributions to Comparative Philippine Grammar* JAOS. vol. xxvii (1906), p. 323, ft. nt. 2; vol. xxviii (1907) p. 1. ft. nt. 2. To these add C. W. Seidenadel, *The language spoken by the Bontok Igorot*, Chicago, 1909.

		I copulative 'to be'	II locative 'to be' definite 'to have'	III indefinite 'to be' indefinite 'to have'
Igor. (Nab.)	<i>aff.</i> <i>neg.</i>	— ag, aligoa	guara anchi	guara anchi
Mag.	<i>aff.</i> <i>neg.</i>	— di	— da	aden da
Sulu	<i>aff.</i> <i>neg.</i>	— di, bukün	aun wai	aun, tuga wai

In the first type there are no affirmative quasi-verbs. The ligatures Tagalog *ay*, *y*, Bontok *ya*, which are very close to being such particles, are better regarded simply as connective particles between predicate and preceding subject.

In type I the negatives are based for the most part on a particle *di* which appears in the different languages in the varying forms *di*, *ri*, *li*, (Ibanag also *ji*),¹ probably with final glottal catch (so at least in Tagalog and Bontok Igorot): *dili* and *diri* are apparently reduplicated forms of *di* (so Conant): in Tagalog *hin-di*, Pampanga *a-li*, Pangasinan *a-li-oa*, Ibanag *a-ri*, we have prefixed elements, *a* being perhaps the same prefix that occurs in Cebuan *ania*, *anaa*, Pampangan *ani*, *ati*. The element *oa* in Pangasinan *alioa* seems to be the quasi-verb *oa*. Pampanga *ai* is derived from *ali* by elision of the intervocalic *l*, and *e* is simply a contraction of *ai* (so Conant). A negative particle *ag* occurs in Pangasinan and Nabaloi, and perhaps in Ibanag *ak-kan*; the negative particle *an*, which is found in Ibanag uncombined, in Pangasinan and Ibanag combined with other particles (viz., *an-di*, *au-an*) as negative verbal particle of the two other types, probably occurs in Iloko *sa-an*, Ibanag *akkan*. Bikol *bako*, Bontok Igorot *faken*, and Sulu *bukün* are evidently identical; these negatives mean not simply 'not,' but indicate 'it is not this but something else' in correcting a mistake. Nabaloi *aligoa* and probably Pangasinan *alioa*, Ibanag *akkan*, have the same meaning.

In type II the affirmative particles are in many cases derived from the demonstratives. Compare Hiligayna *adto* with demonstrative *yadto*; Samaro-Leytean *ini*, *adto*, *ito*, which form the

¹ Cf. *Contributions to Comp. Phil. Gram.*, JAOS, vol. xxvii, 1906, pp. 333, 334.

basis of quasi-verbal particles, with the identical demonstratives; Bikol *idtong* with demonstrative *idto*; Pampanga *ni*, *ti*, *ta* with the demonstratives *ini*, *iti*, *ita*; Sulu *aun* with demonstrative *iaun*; Hiligayna *ari*, *yari*, *ara*, *yara* are to be compared with the demonstratives, Cebuan *k-ari* and Ibanag *yari*, *yara*; Bikol *yaon*, *iyaon* with Tagalog demonstrative *yaon*; Tagalog and Bikol *na*, Cebuan *naa*, *anaa* seem to be connected with the demonstrative particle *na*; Cebuan *nia*, *ania* are perhaps to be connected with the demonstrative particle *ia*. The *n-* of *nia* may have been adopted from *na*, and on the other hand the final *a* of *naa* may have been borrowed from *nia*; what the prefixed *a* is that occurs before the Cebuan and Pampanga particles is not certain. Samaroleytean *ada* and Iloko *adda* are identical with Malay *ada* 'to be.'¹ In Pangasinan and Igorot, *oa*, *woda*, *guara* are apparently the same as the negatives *wa* and *wala*.² Cebuan *tua* and Ibanag *egga* are difficult; *egga* is perhaps the same as Bikol *igua*, the *u* (= *w*) being assimilated to the *g*.

The negative particles of the second type are in most cases based on a particle *wu* (Nabaloi *gua*)³ or on one written variously *la*, *ra*, *da*, sometimes on both combined. The *y* or *i* at the end of the particle in Bisaya, Bikol, Igorot, and Sulu is simply the ligature *i* which has become an integral part of the particle. Pampanga *ala* perhaps contains the same initial *a* as the affirmatives *ani*, *ati*. Pangasinan *andi*, Nabaloi *anchi*,³ is apparently a compound of two negative particles, viz., the *an* which occurs as quasi-verb in Ibanag, and the *di* that forms the basis of most of the negatives of the first type. Ibanag *an*, though said to be a syncopated form of *auan*,⁴ is probably a simple negative particle; *auan* seems to be made up of this *an* and a particle *au-*, which occurs in Tagalog *ay-au* 'not to want.' and *ai-au* the Sulu prohibitive negative. In Igorot the meanings of affirmative and negative particles seem to be reversed. If the affirmative *woda* is the same as the negative *wala*, then it is possible to connect the

¹ Cf. *Contributions to Comp. Phil. Gram.*, JAOS, vol. xxvii, 1906, pp. 349-357.

² Cf. *op. cit.*, p. 399, ft. nt. 3.

³ Cf. *op. cit.*, pp. 332, 333.

⁴ Cf. De Cuevas, *Arte nuevo de la lengua ybanag*, Manila, 1854, p. 241.

negative *ma'id* with the affirmative *may* and explain it as *may* or *ma* + preposition *id*.

In type III the particle *may* probably contains the ligature *y* as in *way*, *waray*; the element *ma* is perhaps to be connected with the prefix *ma* that is used to form adjectives in many of the languages, e. g., Tagalog makes from *lakas* 'strength,' the adjective *ma-lakas* 'strong' originally perhaps 'having strength': Bikol *igua* contains perhaps the particle *wa* used affirmatively as in Pangasinan: Pampanga (*a*)*tin* is simply the (*a*)*ti* of type two with ligature *n*: Magindanau *aden* is perhaps a combination of *ada* (= Malay *ada*, Iloko *adda*) and the demonstrative particle *en*: the etymology of Cebuan *duna*, *aduna* and Sulu *tuga* is uncertain; the initial *a* of *aduna* is probably the same as the initial *a* of Cebuan *ania*, *anaa*, *atua*, Pampanga *ani*, *ati*. In Pangasinan and Igorot. *oala*, *woda*, *guara* appear to correspond to the negative *wala*. The negative particles are regularly the same as those of type II: in Hiligayna the ligature *y* and in Pampanga the ligature *n* do not form an inseparable part of the particle; in Cebuan *duna may* two affirmative particles are used together. and in Hiligayna *wala may*, *wa may*. the negative particle is prefixed to the affirmative. Sometimes another word or particle is employed so frequently in connection with the quasi-verb that it has become an integral part of the word: so, for example, in Tagalog *may-roon* = *may*, and Nabaloi *guara-anan* = *guara*. Here *roon* is the adverb *doon* 'there;' *anan* is perhaps a similar element.

In some languages the quasi-verbs of types II and III are varied to express person or tense. In some of the Bisaya dialects and in Pampanga different particles are apparently employed according to the person of the subject. In Cebuan (*a*)*nia* is employed with first person, *anaa* or *naa* with the second or third, and (*a*)*tua* with the third person. In Pampanga (*a*)*ni* and (*a*)*ti* are used with all three persons, (*a*)*ta* only with the third. The reason for this seems to be that the forms used with the first and second persons are based on the nearer demonstratives, and mean 'to be here,' those that are employed only with the third are based on the more remote demonstratives, and mean 'to be there.'

In Samaro-Leytean the particles are varied like verbs to express tense, viz..

	Pres.	Pret.	Fut.
'to be there'	iito aada aadto	nakada nakadto	makada makadto
'to be here'	iini	nakanhi (makanhi) ¹	

Occasionally in Tagalog the combination of the particle *na* + an adverb of place is treated as if it were the past tense of a verb with prefixed *ma*, e. g., from *naroon* is formed a present tense *naroroon*.

In Magindanao *aden* makes a preterite *naden*.

Sentences containing 'copulative to be' are expressed in most of the languages by simply juxtaposing subject and predicate. The normal order, affirmative and negative, in all the languages seems to be—predicate, subject, in negative sentences the negative standing before the predicate,² e. g.:

Tag. mataas ito-ng lalaki 'this man is tall.'

matatapang sila 'they are brave.'

hindī mabuti ang tawo 'the man is not good.'

hindī sila³ matatapang 'they are not brave.'

hindī ko ina⁴ '(she) is not my mother.'

Bis. (Ceb.) salapian ako 'I am rich.'

dili maayo si Pedro 'Pedro is not good.'

Bis. (Hil.) maayo ini 'this is good.'

si Pedro ako 'I am Pedro.'

maloloyon ang Dios 'God is merciful.'

dili ako³ si padre Ramon 'I am not Father Ramon.'

Bik. marahay ako 'I am good.'

bako ini-ng papel 'it is not this paper.'

bako-ng⁵ sako iyan 'this is not mine.'

¹ Not given but implied in Figueroa, *Arte del idioma visaya de Samar Leyte*, 2^a ed., Binondo, 1872.

² Negative examples are not always to be found in the material available for study, but the rule probably holds good in all cases.

³ To judge from these examples, when the subject is a personal pronoun in Tagalog and Hiligayna (presumably also in the other Bisaya dialects) it stands between the negative and the rest of the predicate.

⁴ When the predicate of a negative sentence in Tagalog is a noun modified by a possessive pronoun and the subject is not expressed, the postpositive form of the possessive seems to be placed between negative and noun as here.

⁵ A ligature seems to be regularly employed after the negatives *saan*, *alioa*, *aligao*, and also sometimes after *bako*.

Pamp. masanting ya 'he is handsome.'

Pang. kapitan ak 'I am *capitan*.'

balêg so kataoan 'the master is powerful.'

ag maronong
alioa-n⁵ maronong } 'he is wise.'

Ilok. tao ak 'I am a man.'

maymaysa ak 'I am alone.'

naimbag daytoy 'this is good.'

di nasayaat toy a pusa 'this cat is not pretty.'

saan a⁵ daket toy a silid 'this room is not large.'

Iban. babayak 'I am a woman.'

mapia im masipot 'the gentle one is good.'

Igor. (Bon.) kawis siya 'he is good.'

adi kawis sa 'this is not good.'

Igor. (Nab.) kadubong-ko iai 'this is my hat.'

aligoa-n⁵ balei-ko 'it is not my house.'

Mag. mapia si Pedro 'Pedro is good.'

Sulu maraiiau tau ien 'that man is good.'

bukün amu ien 'that is not exact.'

The subject, however, may also stand first, but this seems to be the case in many of the languages at least, only when it is specially emphasized. In the northern group of Philippine Languages, Pangasinan, Iloko, Ibanag, and probably Pampanga¹ this is apparently allowed only when the predicate is definite, *i. e.*, is preceded by the definite article or a demonstrative pronoun. When the subject is a personal pronoun these languages employ a special emphatic form, *e. g.*:

Pang. si Juan so mabayani 'Juan is the brave one.'

say kapitan so linma dia 'the *capitan* was the
one that came here.'

siak so kapitan 'I am the *capitan*.'

Ilok. sika ti napigsa 'you are the brave one.'

toy a tao ti naimbag 'this man is the good one.'

Iban. sakan ig gobernador 'I am the Governor.'

sikau si Pedro 'you are Pedro.'

Cebuan and Hiligayna seem to follow the same rule as the northern languages, though they have no special series of emphatic

¹ No examples are available. but the fact that Pampanga possesses a special series of emphatic personal pronouns, besides its general resemblance to the other languages makes this probable.

pronouns; the definite article may be replaced by the particle *y*, e. g.:

Ceb. si Pedro ang } maloloyon { 'Pedro is the
si Pedro-y } merciful one.'

Hil. siya ang amay ko 'he is my father.'

ako-y amay niya 'I am his father.'

In Tagalog, Samaro-Leytean, Bikol, Bontok Igorot, Magindanau, and Sulu, the subject may apparently stand first without special emphasis; in Tagalog and Bontok Igorot the subject and predicate are joined by the particle *ay* (after a vowel *ay* or '*y*'), and *ya* respectively, e. g.:

Tag. ang tawo 'y mabuti 'the man is good.'

ikaw ay hindi matapang 'you are not brave.'

Sam.-Ley. si Juan diri maopay 'Juan is not good.'

Bik. si Antonio maraot 'Antonio is bad.'

ini bulauan 'this is gold.'

Igor. (Bon.) nan mamamagkid ya fanig 'the girls are little.

sika ya antjo 'you are tall.'

Mag. su kayo makapal 'the tree is large.'

si Rudolfo mapulu a tau 'Rudolf is a tall man.'

su islam talau 'the moro is a coward.'

Sulu in salapa nia balawan 'his betel-box is (made of) gold.'

in batabata ini di masipug 'this boy is without shame (not having-shame).'

In constructions of type II, the affirmative is expressed by particles which, in many cases at least, are derived from the demonstrative pronouns; the negative particle is regularly the same as in the third type. When the sentence contains 'locative *to be*' the particle is regularly followed by the oblique case of the place in which or a demonstrative adverb of place; when it contains 'definite *to have*,' by the oblique case of the possessor. In the second case the subject of the sentence is the thing possessed. The rules with regard to the relative position of subject and predicate seem to be the same as in type I; in Tagalog, and apparently in Bontok Igorot, *ay*, *y* and *ya* are used as in type I, e. g.:

Tag. ang bata 'y na sa bahay } 'the boy is in the house.'

na sa bahay ang batà }

ang pari ay walâ sa simbahan } 'the priest is not in
walâ sa simbahan ang pari } the church.'

ang kabayo ni Pedro 'y na sa akin 'I have
Pedro's horse.'

walâ kay Juan ang salapî 'Juan has not the
money.'

Bis. (Ceb.) ania kanako ang sinina 'I have the shirt.'
tua sa ilalom sa lamesa '(it) is under the
table.'

Bis. (Hil.) adto siya sa Ogtong 'he is at Ogtong.'
wala siya sa San Marino 'he is not at San
Marino.'

way diri ang amay ko 'my father is not here.'
Bis. (Sam.-Ley.) iini sa akon kamut 'it is here in my hand.'
aadto sa balay 'it is there in the house.'
nakadto ka sa Katbalogan 'have you been in
Katbalogan?'

Bik. ang kupia iyaon sa lamesa 'the hat is on the
table.'

day duman sa lamesa an sogkod 'the stick is
not on the table.'

na saimo dao an panyo ko 'have you my
handkerchief?'

Pamp. ni-ko keni 'I am here.'
ta-yo karin king silid 'he is there in the room.'
ala-yo keti 'he is not here.'

Pang. oa-d abung to si Pedro 'Pedro is¹ in his house.'
oa-d sika-y kaballo 'have you the horse?'

Ilok. adda iti simbaan si apo Padi 'the priest is in
the church.'

adda ak ditoy 'I am here.'

aoan ditoy ti aso 'the dog is not here.'

adda kenka ti pagtinteroak 'have you my ink-
stand.'

adda-da iti cocinero 'the cook has them.'

aoan ti malo kaniak 'I have not the hammer.'

Iban. egga ip pirak nikau 'have you the money?'
auas¹ si Pedro tab balay 'Pedro is not in the
house.'

Igor. (Bon.) woday-ak is nan afong 'I am in the house.'

¹ Here *n* is assimilated to the following consonant, cf. *Contributions to Comp. Phil. Gram.*, p. 336.

ma'id siya isna adwani 'he is not here to-day.
siya ya woday isna 'he is here.'

Igor. (Nab.) guara-ak chi balei 'I am in the house.'

Sulu in barong mu aun ha-lum bai 'your barong is
in the house.'

wai run pa-lum bai 'it is not in the house.'

In Magindanau this type, in the affirmative, seems to be expressed in the same way as type I. without particle, the prepositional phrase or adverb simply taking the place of the nominal or adjectival predicate, e. g.:

su glat sa linauau na tulugan 'the knife is on the bed.'

su asu sa lamalama 'the dog is on the plaza.'

Some of the other languages also occasionally follow this construction in the affirmative, e. g.:

Bis. (Ceb.) dinhi ako 'I am here.'

Bis. (Hil.) dira si Juan 'Juan is there.'

Ilok. dita ka pay 'are you still there?'

Iban. ajjau ak 'I am here.'

In constructions of type III, in the case of 'indefinite to have' the possessor stands sometimes in the nominative, sometimes in the genitive, sometimes, probably after the analogy of type II, in the oblique. The original idea in the case of the genitive in such a sentence as 'I have money' is probably 'there is, there exists money of mine.' The possessor stands in the nominative only, in Tagalog, and apparently in Hiligayna, Samaro-Leytean, Bikol, and Sulu; in the genitive only, in Iloko: in either nominative or genitive in Cebuano, Pampanga, Nabaloi, and Magindanau; in either genitive or oblique in Ibanag, Pangasinan, and Bontok Igorot.

The thing possessed may be preceded by a ligature or indefinite particle or it may stand alone. The ligatures are the following viz., Tag., Bik. *-ng*, Pamp. *-n*, Ceb., Hil., Pang. *-y*, Mag. *a*; the indefinite particles, which in some languages (e. g., Iloko) seem to be used only after a negative, are viz., Ceb. *ug*, *in*, *ing*, Hil. *sing*, Iban. *tu*:—Bik. *nin*, Igor. (Bon.) *nan*, Nab. *ne*, Ilok. *ti*, which are used in the same way as the indefinite particles, although forms of the definite article, are to be classed here. In some cases a ligature has become an integral part of the quasi-verb, so apparently in Tag., Bis., Bik. *ma-y*, Bis. *wa-y*, *wala-y*, *wara-y*, Bik. *da-y*, Pamp. *ti-n*, Igor. (Bon.) *woda-y*: Sulu *tuga* is probably *tug* (used as nominal

prefix, e. g., *tug-bai* 'having a house, owner of a house') + the ligature *a*. The object may stand without preceding ligature or indefinite particle after some of these quasi-verbs, under just what conditions is not in all cases clear; in Tagalog or Bisaya an object that follows *may* directly has this construction.

In the case of 'indefinite to be,' the element that corresponds to the possessor, being indefinite 'one, they,' is not expressed; the thing that is or exists, the logical subject, stands in the same construction as the thing possessed; the place where is expressed by an adverb of place or by an oblique case.

Here, as in type II, the relative position of subject and predicate are governed by the same rules as in type I. In Tagalog the particles *ay*, *y*, in Bontok Igorot the particle *ya* are used as in the two other types.

The following examples will illustrate these principles, e. g.:

Tag. *may ako-ng salapî* } 'I have money.'
 ako 'y may salapî }
 walâ ako-ng anak } 'I have no son.'
 ako 'y wala-ng anak }
 may tawo sa bahay 'there is a man in the house.'
 wala-ng tawo sa lansaŋgan 'there is no one on
 the street.'

Bis. (Ceb.) *duna-y âko-ng (gen.) tiempo* } 'I have time.'
 duna akó-y (nom.) tiempo }
 wala akó (nom.) ug humay 'I have no rice.'
 aduna ing katigayonan 'he has riches.'

Bis. (Hil.) *ako may asawa na* } 'I have a wife now.'
 may asawa na ako }
 wa-y kan'on ini-ng tauo 'this man has no food.'
 wala-y buut yana 'he has no sense.'
 wa ka-y buut 'you have no sense.'
 wala ako-y kan'on 'I have no food.'
 wala pa siya sing buut 'he has still no sense.'
 way ako sing katungdanan sa pagbuhat sina
 'I have no obligation to do that.'
 wala may pilak ako 'I have no money.'

Bis. (Sam.-Ley.) *may salapî ka* 'have you any money?'
 waray ka salapî 'you have no money.'

Bik. *igua ako-ng saro-ng ayam na magayom* 'I have
 a pretty dog.'

- day ako-ng gubing 'I have no clothing.'
 ika dai-ng gubing 'you have no clothes.'
 day ako nin saro-ng sadit 'I have not one cuarto.'
 igua ka nin tubig 'have you any water?'
 dai-ng tawo sa harong 'there is no one in the house.'
- Pamp. atin kopia ning kapatad mo 'has your brother a hat?'
 atin mo¹-n imalan 'he has indeed clothing.'
 atin palæ karin 'there is rice there.'
 ala-n imalan mo }
 ala ka-n imalan } 'have you no clothes?'
 ala-n palæ karin 'there is no rice there.'
- Pang. oala-y kaballo-m }
 oala-y kaballo'd sika } 'have you a horse?'
 oala-y polvos yo }
 oala-y polvos ed sikayo } 'have you (pl.) any powders?'
 oala-y too ed abung 'there are people in the house.'
 andi gapo-y polvos 'there are no powders at all.'
- Ilok. adda tabako-m 'have you any tobacco?'
 adda aso-mi 'we have a dog.'
 aoan ti aso-da 'they have no dog.'
 aoan ti naimbag a arak-na 'he has no good wine.'
 adda tao itoy a balay 'there are people in this house.'
 adda arak ditoy 'there is wine here.'
 aoan ti pusa iti balay itoy 'there are no cats in this house.'
- Iban. egga ginageram mu }
 egga tu ginageram mu } (have you any slandered one).'
 auan yaya tu utok }
 auas² sa tu utok } 'he has judgment.'
 auan ak tu pirak }
 auan niakan tu pirak } 'I have no money.'
 auas² si Pedro tu utok }
 auat² tu utok takkuani Pedro } 'Pedro has no judgment.'
 at² tu tolay tab balay 'there is no one in the house.'
- Igor. (Bon.) woday ken sak'en nan afong }
 woday nan afong-ko } 'I have a house.'
 woda nan kayo 'there is a tree.'

¹ *mo* is here an adverb.

² Here *n* is assimilated to the following consonant, cf. *Contributions to Comp. Phil. Gram.*, p. 336.

woda nan onash id Falidfid 'there was a sugar-cane-plantation at Falidfid.'

ma'id kayo-k 'I have no wood.'

ma'id noang 'there is no buffalo (here).'

Igor. (Nab.) guara balei-to 'has he a house?'

anchi balei-to 'he has no house.'

guara anan tayo ne kabadyo 'we have horses.'

anchi chanum 'there is no water.'

Mag. aden aku bengala 'I have a shirt.'

aden a tau lu 'there are people there.'

da palay ko 'I have no rice.'

da musala nin 'he has no handkerchief.'

da tau lu 'there is no one there.'

kagay naden aku pilak 'yesterday I had money.'

Sulu in sapit tuga jungal 'the sapit has a bowsprit.'

tau tuga ekog 'men that have tails.'

tuga buling-batu ha Sog 'there is coal in Sulu.'

in hula ini tuga saitan 'this country is possessed with devils (has devils).'

tuga tau ha bai ini 'there are people in this house.'

aun kah bili-bili ha Sog 'are there any sheep in Sulu?'

aun ang gatus 'there are a hundred.'

wai run manok kabili ha Sog 'there are no capons in Sulu.'

wai kasudahan in hinang ini 'this work has no end.'

The object of the quasi-verbal particles of this third type is in many cases a verbal form, the construction corresponding usually to the English idiom 'to have to.' This construction certainly occurs in many of the languages and probably in all of them, but a few examples from Tagalog will suffice to illustrate the general principle, e. g.:

Tag. may siya-ng pinatay na tawo 'he has killed a man (he has a killed man).'

walâ ako-ng sasabihin 'I have nothing to say (I have not anything-about-to-be-said).'

may nagnakaw na tawo } 'there was a robber (a man
may tawo-ng nagnakaw } that robbed).'

Cf. also examples in next paragraph.

These particles in connection with their objects often express indefinite pronominal ideas, such as 'some,' 'any,' 'something,'

'anything,' 'no,' 'nothing.' As in the preceding case the examples will be confined to Tagalog, e. g.:

mayroon ako-ng tinapay 'I have some bread.'

mayroon ka-ng salapî 'have you any money?'

mayroon siya-ng sinabi 'did he say anything?'

mayroon kayo-ng hinahanap 'are you looking, for anyone, anything.'

walâ ako-ng asawa 'I have no wife.'

walâ ako-ng sasabihin 'I have nothing to say.'

walâ ako-ng sinabi 'I said nothing.'

All of the three types may also be expressed interrogatively, with negative interrogation, and in connection with special interrogative words such as 'who,' 'what.'

The simple interrogative and negative interrogative of these types do not differ from the affirmative and negative except in the addition of interrogative particles, and the changes in position caused by them. Such particles are, e. g.: Tag. *baga*, *kayâ*, Bis. *ba*, Bik. *baga*, Pamp. *ta*, *kaya*, *kasi*, Pang. *kasi*, Iban. *dasi*, Sulu *kah*. In some languages these particles are more commonly used than in others; they do not appear to be absolutely essential in any. They usually stand after or between two elements of the predicate, but may stand after the subject when it precedes the predicate. When special interrogative words are used they regularly constitute the predicate of the sentence, the remainder of the sentence standing as subject. These special interrogative words may be followed by the interrogative particles. Some examples from Tagalog will illustrate the general principles of construction, e. g.:

malaki *baga* ang iyo-ng aso 'is your dog large?'

mayaman ka *baga* 'are you rich?'

na sa bahay *baga* ang ina mo 'is your mother in the house?'

walâ *baga* sa kaniya ang damit ko 'has-n't he my clothes?'

mayroon *baga* sila-ng salapî 'have they any money?'

sino ka 'who are you?'

sino *kayâ* ito-ng babayi-ng ito 'who is this woman?'

kanino *baga* ito-ng bahay 'whose is this house?'

ano-ng¹ ngalan mo 'what is your name?'

sino ang }
sino-ng¹ } na sa bahay 'who is in the house?'

¹ Ligature used for the article *ang*.

ano-ng bulaklak ang na sa kaniya 'what flower has he?'

sino-ang } may roong¹ baril 'who has a gun?'

sino-ng }

ano-ng mayroon ka 'what have you?'

The foregoing discussion does not claim to be by any means an exhaustive treatment of the two important ideas 'to be' and 'to have' in the Philippine Languages, it simply indicates the lines along which their further study should be carried. It is practically impossible, on the basis of the material available for study to obtain a thoroughgoing knowledge of these three types of construction, and as such a knowledge is essential for the mastery of any Philippine language, those who have the opportunity to investigate these languages at first hand should attempt to supply this want. They should study these types from all points of view. Numerous examples should be collected illustrating the various types expressed affirmatively, negatively, interrogatively, with negative interrogation, and with special interrogative words. These examples should present instances of all the parts of speech, both alone and with all possible modifiers, employed as subject, predicate, or case form depending on the quasi-verb. Especial attention should be devoted to the construction of the pronouns (personal, demonstrative, the article, interrogative, indefinite particles, ligatures) and to the construction of postpositive words (i. e., pronominal or adverbial particles like Tagalog *ka, mo; na, pa, бага*, etc., which must always follow some other word); and the rules governing the position of the various elements should be carefully worked out and tested. Moreover any special idioms founded on these constructions should be pointed out and thoroughly discussed.

It is a difficult matter for those who have no special linguistic training to recognize what things are important and what are trivial in the great mass of material with which they are brought in contact, when they take up the study of a Philippine language, especially one of those about which little is known. For such it is hoped that the sketch here presented may furnish an introduction and guide to the study of one of the most fundamental portions of the grammar of the Philippine Languages.

¹ *Roön* + *ng* > *roóng* + *ng* > *roong* by assimilation of *n* to *ng* and simplification of the doubling. Italics are used to indicate that final *ng* results from *n* + ligature *ng*.

N.C. ✓

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